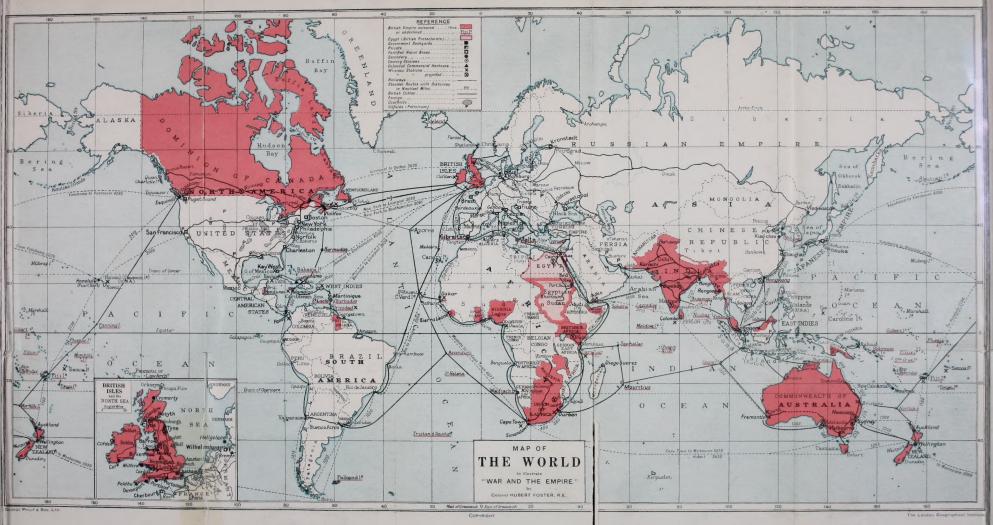
WAR AND THE EMPIRE



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WAR AND THE EMPIRE

THE PRINCIPLES OF IMPERIAL DEFENCE

BY

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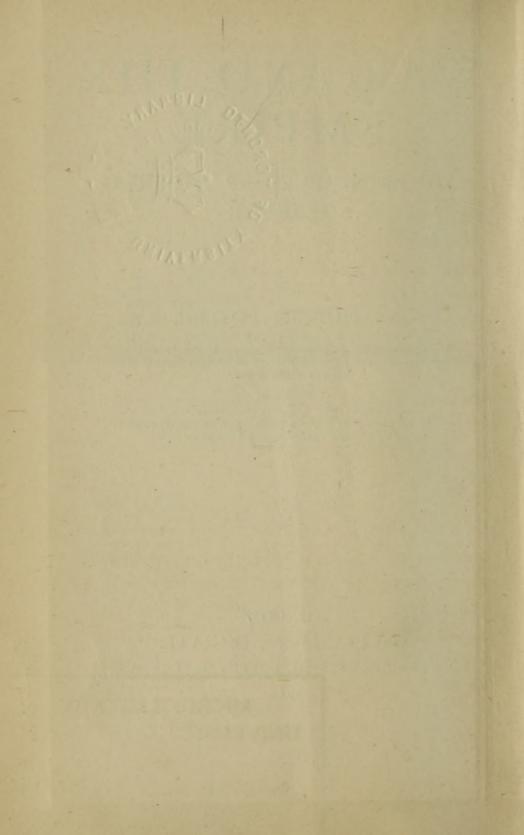
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PREFACE

The object of this book is to state and explain the principles of the Defence of the British Empire, and to show how they have developed from the rich experience gained during the wars of the past three centuries. These principles could hardly be established by mere common sense. Judgment not specially trained is apt to overlook the less obvious factors of the problem, and the lessons which the past can teach.

As this work deals essentially with principles, most of the statements and statistics that are correct only for the present are relegated to an Appendix. Facts and figures are given in general terms and round numbers, so as to be more readily grasped. Technical wording has been translated into ordinary parlance. Care has been taken to keep clear of controversial subjects, such as Colonial navies, com-

pulsory training, naval strength, the invasion of England, on which judgment is often warped by prejudice or political bias.

The author makes no claim to originality, but believes that his statements follow the teaching of history and are borne out by weight of authority. In their support he has therefore freely inserted historical examples, and quotations from better-known writers. He would plead for the acceptance by the thinking public of the principles thus enunciated and endorsed.

HUBERT FOSTER.

1914.

PUBLISHERS' NOTE

WHEN this book was written the author expected it to be published in the earlier part of the year, but circumstances unfortunately delayed its reaching our hands until October.

A few verbal alterations have been rendered necessary by the outbreak of the present war.

November 1914.

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PART I THE BRITISH EMPIRE

CHAPTER I

INTRODUCTION

"How to inspire British citizens under many skies with an abiding sense of union based on common patriotism, common interests, and common danger?"—SIR GEORGE CLARKE.

The author would appeal to all who are responsible for the direction of affairs in the British Empire to realise the conditions on which its security rests. Those responsible are not merely the politicians, but the electors who choose them, those who write for the press, those who read the newspapers, those who think and talk. The mass of individual views termed Public Opinion is, in the end, the dominant force in government.

It is claimed that the views on Imperial Defence put forward in this book are the principles which have inspired our great Imperial statesmen and directed the continuous policy of the Admiralty from the times of Cromwell and Blake, of Chatham and Anson, of Barham and Jervis, to those of the Admiralty to-day. They have been equally accepted by the recent Conservative, and the present Liberal, Governments of the United Kingdom.

With the growth of the Empire have evolved the principles of its defence, and they rule to-day as of old, in spite of all technical changes in warfare. Wise conformity with them has made it possible for a British Empire to arise and flourish, for its territory to be kept inviolate, and for British commerce and wealth to increase in the face of jealous rivals and bitter foes. Only by adherence to these principles can the Empire be safeguarded in the future.

No doctrine of Defence was formulated till recent years. The national tempera-

ment always tended towards action rather than to analysis and classification. Intuition derived unconsciously from practice and experience anticipated written exposition. In these days, however, it is most desirable that the people should understand something of the springs of action. Not only do their votes keep in power the executive authorities, ratify their action, and consent to their expenditure, but without the support of the nation no wise and vigorous war-policy can be expected. Popular ignorance, or indifference, tends to hamper war preparation. Statesmen and their naval and military advisers must carry the country with them if the King's dominions are to be economically and effectively defended.

A fortunate capacity for clear thinking, and a patriotic desire to educate the nation and its administrators, led students of war like Admiral Philip Colomb and his brother Sir John to investigate the principles of naval strategy, a little while before Captain Mahan of the U.S. Navy began to do

the same thing for his own country. Sir Charles Dilke, Admiral Sir Cyprian Bridge, Sir George Clarke, R.E. (now Lord Sydenham), Mr Thursfield, and Mr Julian Corbett carried on the work, and by writing and speaking endeavoured to teach the British people and statesmen true principles of national strategy.

The result of the work of these and other thinkers has been the conversion of the leaders of both political parties to a scientific and rational policy of defence, notably Mr A. J. Balfour, Mr Arnold - Forster, Mr Asquith, and Lord Haldane. There followed the establishment of the Colonial Defence Committee, and subsequently that of the Committee of Imperial Defence, a great advance towards co-operation in war between both services and between all portions of the Empire. It thus became possible to formulate officially a reasoned doctrine of war-policy for the Empire, and it is the object of these pages to present it concisely to the public.

CHAPTER II

THE DEFENCE OF THE EMPIRE

"A great Empire and little minds go ill together."—BURKE.

THE expression "defence of the Empire" must not be interpreted in a narrow sense as referring merely to the security of British It does mean defending the material frame of the Empire, the native soil and the homes of all British folk whereever they may lie—in islands or in continents-in the east or in the west-in the northern or southern hemispheres. But defence means more: it means safeguarding British property in war, maintaining unimpeded the flow of commerce—the life-blood of the Empire,—and keeping up the continuous communication throughout it by mail and cable, which may be considered its nervous system.

Defence too, in a wider sense, is concerned with British interests the whole world over: internal peace throughout the Empire, protection of British subjects and their rights abroad, security for their trading in foreign lands, and the maintenance of British credit as the corner-stone of commerce.

We have above spoken of the British Empire as a living organism. But it also possesses a soul, and its defence has an ethical aspect, of more value than the merely material. Sir Wilfrid Laurier, unbiassed by English blood in his veins, once called the Empire "the greatest force that ever existed for the rights of men in history." Ex-President Taft, in a speech on 29th January 1914, said: "The debt the world owes England ought to be acknowledged in no grudging manner. The impartial historian must look at the British Empire from the standpoint of benevolent, useful, elevating government . . . of benefit to the human race." The British Empire, with its free trade and free immigration, is a living example of the advantages described by the Chinese philosopher, Mencius, twentyfive centuries ago, as resulting from equity and efficiency in government: "It is proper to apply oneself to exercise well-doing in the administration. Then all workers, including those of foreign nations, will desire to cultivate your lands. All merchants will place their goods in your markets."

The main facts of the material aspect of the Empire may be stated briefly. The British Empire is no doubt predominant among the nations in area, population, and wealth. In extent and in population it constitutes a fifth or more of the world; its shipping equals that of all other countries; its trade greatly exceeds that of any one. London is the chief market and the financial centre of civilisation; British credit is the world's standard.¹

But all this is little in comparison with the fact that the British Empire stands for a lofty conception of civilisation, for social

¹ See Appendix A.

and moral progress, for a high standard of duty, conduct, and public opinion. Its defence implies all measures necessary to keep up the reputation of the Empire, and to sustain the authority by which a few white men govern, by courage and strength of character, millions of Asiatics and myriads of African and other "untamed folk and wild."

Defence is necessary for the due development of the ideals of the British—liberty, justice, and humanity, freedom of the press, freedom of speech, freedom of trade—ideals whose growth could not fail to be stunted by foreign conquest. Defence in its highest aspect means an unceasing determination to ensure the inviolability of the soil painfully won for the British by their forefathers, because on it is surely rising an immaterial structure of ethical, economic, and political doctrine, tending to the prosperity, happiness, and well-ordered living of all subjects of the Crown, and of inestimable benefit in the future to the world at large.

The words "British Empire" occur so frequently in this book that it may be well to see what it consists of. The Empire, the customary, if not altogether suitable, name for the possessions of the "King of Great Britain and Ireland and the Dominions beyond the Seas," comprises, first, the United Kingdom, the predominant partner, with the greater share of the wealth and trade, nearly the whole of the merchant shipping, and forty-six millions of white inhabitants. Next come the self-governing Dominions— Canada, Australia, South Africa, New Zealand, Newfoundland—with fourteen millions of white population. India, that great possession of the British Crown, may also be regarded as self-governing for the purposes of Imperial Strategy, as its Government manages its own foreign policy and military affairs, under the general superintendence of the Secretary of State for India in the British Cabinet. Egypt, nominally an independent portion of the Turkish Empire, is controlled by England, which administers and officers her army, and defends her with a British garrison.

The rest of the Empire consists of Crown Colonies, Dependencies, and Protectorates, which differ greatly in area and importance and in geographical situation. They are also of remarkable variety in population and form of government. The inhabitants of Gibraltar, Malta, Cyprus, and the Falklands are of white race, and there is a small but important white upper class in India, Ceylon, the Straits Settlements, Hongkong, Mauritius, and the West Indies. As to non-Europeans, there are Arabs in Aden and Zanzibar, Chinese in Wei-hai-wei and Hongkong; the Straits Settlements have a Chinese as well as a Malay population. That of our West Indian and African possessions is Negro, that of Mauritius mainly Indian.

As to government, the Crown Colonies of Malta, Cyprus, Mauritius, and the West Indies have a certain degree of popular representation; those of Ceylon and Hongkong have nominated councils. The protectorates of Rhodesia and North Borneo are governed by chartered companies; the other protectorates are under their own native rulers; Gibraltar and Aden are rock fortresses, governed by the general in command of their garrisons; Ascension is under a naval autocrat; St Helena, the Seychelles, and Wei-hai-wei under a civil one; the small islands of the Pacific know little government, and Tristan d'Acunha in the South Atlantic none at all.

In discussing Imperial Defence from a general point of view it is agreed that the minor parts of the Empire are only capable of providing a moderate local security for themselves, or contributing a few white volunteers to the Imperial land forces, in war, and many of them not even that. The responsibility for the defence of the Empire rests on the people of European race dwelling in the Mother Country and the self-governing Dominions, some 60,000,000 in all. India has often taken a share in the

wars of the Empire, and, with her 75,000 white troops and a native army twice as strong, can supply a considerable field force for action overseas whenever needed.

The following pages deal largely with the part which should be played in Imperial Defence by the Dominions. India is prepared to take her share in the land wars of the Empire, as she has often done in the past. Great Britain has not neglected her naval and military responsibilities in peace or in war. The British Army and Navy have been for centuries engaged in enlarging and guarding the British Empire, which will be permanently safe from any attack as soon as all its people of European descent realise the vital importance of combining for its defence, and insist on their respective Governments taking the proper measures to this end.

There has been of late considerable interest aroused throughout the white population of the Empire overseas as to the matter of defence. This may be due to an awakening of conscience, to a realisation of the great debt owed by the Dominions to the Mother Country for the protection which has till now sheltered their growth. It may, however, be due merely to a subconscious alarm for their safety, combined with an awakening of self-consciousness and pride in national life. In any case, the people of Greater Britain are endeavouring to take on themselves some share of the burden of Empire, and to prepare to play their part in its defence.

The difficulty is that there exists among the public no very definite idea of what defence means. Too many people regard it as merely trying to make their own land safe—a shortsighted view, as selfish as futile, which neglects the security of each sister-dominion, while not really ensuring their own. Such a policy would in the end leave each dominion still dependent on England for safety, and not add appreciably to the strength of the Empire. Mutual support is the keynote of Imperial Defence. Local defence will in war be powerless to secure the framework

of the Empire — the sea-communications whose safety depends on the world-wide effect of Sea Power.

It is no doubt recognised in a general way all over the Empire that defence depends ultimately on the Navy. But this very true principle is not so far understood as to lead to its logical conclusion. It is seldom realised that the action of the Navy is the main factor limiting the scale of the hostile attack possible, and therefore ruling the scale of the defence required. Attack and defence are too often regarded as if each portion of the Empire stood alone, face to face with some powerful foe, and might have to meet an attack by his whole strength. This is not the case. Empire is all one, and attack on any portion of it means war with the whole. How best to defend any particular portion is really part of a larger question-how the forces of the whole Empire should act in war against any disturber of the pax Britannica.

It should be realised that true defence

does not mean mere passive resistance to attack. It is of little avail to defend yourself against an enemy unless you are prepared to attack him sooner or later. He may be foiled, but never overcome, by passive defence, which may make an enemy fail in one attack, but will not prevent him from repeating it when and where he likes. To guard yourself is not to beat your enemy, as any boxing match shows. The best way to defend yourself is to get your blows in first, and so forestall his. Defence to be successful implies War-hard hitting at the right place and the right time. Therefore, the defence of the Empire contemplates the Empire at War, and not merely on the defensive, awaiting attack. What we have to consider is not so much Imperial Defence as Imperial Strategy—the correct way for the Empire to conduct a great world war should it be attacked.

The defence of the British Empire must therefore be understood as demanding attack on its enemies, which will provide the best protection to each portion of it. An enemy occupied in defending himself will have little strength or breathing-space to devote to the offensive. The concentrated force making this attack will be a more effective defence to each portion of the Empire than the separate local defensive forces they aim at providing—a wasteful and ineffective way of trying to attain security.

When France went to war with England in 1778, Charles James Fox endorsed this lesson in the House of Commons, with the insight which always led him to the root of the matter, and in his usual stirring words: "A defensive war you can never think of. A defensive war would ruin the country at any time and in any circumstances; an offensive war is pointed out as proper for this country; our situation points it out, and the spirit of the nation impels to attack."

Granted, then, that the defence of the Empire means striking, we are confronted by the fact that blows from an Island Empire can only be delivered by sea, and

therefore imply naval action. It is true that the stroke may eventually fall on the enemy's territory, but the possibility of being able to strike him there depends on the success of naval action, first in opening the sea for the passage of the land forces, and subsequently in guarding their seacommunications. Without naval support they could neither reach the enemy nor remain engaged with him overseas. Such joint naval and military action has characterised all the operations of Britain in the past, and similar action is to be expected in future wars.

It will thus be seen that for the British Empire Sea Power is the fundamental condition for waging offensive war—the only effective form of Imperial Defence. It is only possible for an Island Power to act with its land forces at all, after its action on sea has been successful. Hence the cooperation of the Navy and Army is necessary in all British wars, and the defence of the Empire may be said to rest on a co-ordina-

tion of naval and military effort, and the correct allotment of each to its appropriate sphere of action.

It was only so that England, in a world-struggle of conflicting interests, was able to seize and hold her early Colonies, and they have marvellously developed in extent and prosperity under the little noticed but ever-present shelter of British naval predominance. The British Empire, born of Sea Trade, and cradled by the Sea Power of England, depends now, as ever, on the Navy for its very existence.

PART II THE WAR AT SEA

CHAPTER III

NAVAL WAR

"A fleet of British battleships are the best negotiators in Europe. They always speak not to be misunderstood, and generally gain their point."—Nelson.

It has been shown that the condition for the defence of the British Empire is the power of making war on the enemy. As this war is primarily waged on the sea, the study of Imperial Defence should begin by investigating the action of the Navy in war. The broad features of naval hostilities now and in the future can be deduced from British experience in the past, which has been long and rich. Our naval wars form a record of almost unbroken success, often

against odds, and England has come out of each struggle with her naval superiority firmly established.

The first period of a great war between Naval Powers will be marked by a contest, perhaps long drawn out, for obtaining definite superiority. The movements and combinations of the navies during this contest are the province of Naval Strategy, or the art of so directing fleets and squadrons that they meet the enemy at advantage.

The principles of Strategy are identical for Sea and for Land War. This is to be expected, for Strategy and Tactics both on land and sea mean fighting to best effect under the conditions that rule and with the means that are available.

These principles are mainly based at the present day on the conclusions arrived at by the great thinker Clausewitz, in his classic book On War, as a result of close study of the Napoleonic Wars in Europe, in which he himself participated. They may be looked on as the principles of Napoleon, especially

as many of them are definitely stated in that great soldier's maxims, and others can be readily deduced from his practice in war.

But these principles are far older than Napoleon, and were not an original contribution by him to the Art of War. The first great soldier of modern Europe to exemplify them is Cromwell, who always aimed at his foe's main force, moved with rapidity, and hit hard with all his strength. His clearness of vision as to the decisive point to strike, his concentration of mind on his plan once formed, his exclusiveness of purpose, and above all his resolution and power of subordinating the will of others, are all what we now term "Napoleonic." In later years similar principles of conducting war have always been followed by our great sailors, and Mr Julian Corbett, in his lucid analysis of Naval Strategy, has shown how they flowed from the example set by the genius of Cromwell for war.

All the great sea-fighters of the Protectorate were soldiers trained in Cromwell's wars.

Blake, Deane, and Monk were hard-fighting and successful commanders of fleets, but they had for years led the Ironsides in battle on land before they fought afloat. The traditional spirit of the British Navy was inspired by their conduct. To them, and through them to Cromwell, we owe the historic determination of our sailors to seek out the enemy, to engage him vigorously, and to pursue him relentlessly. This spirit may be seen in hundreds of the actions of British sailors: perhaps at its greatest height when Hawke followed the French fleet into Quiberon Bay in the falling light of a stormy November day; when Jervis engaged a fleet nearly twice his strength at St Vincent; when Nelson skirted the shoals of Aboukir at nightfall to destroy a superior fleet.

A study of the methods of war of British sailors, or for the matter of that of British soldiers in India, teaches unmistakably the value of the resolute offensive and of vigour in its execution, and might indeed have

furnished Continental strategists with as good a basis as Napoleon's wars for laying down the principles of Strategy. These may be briefly summarised as follows:—

1. Seize the *initiative*, and keep it by attacking. Avoid passive defence.

2. Act against the enemy's main forces, neglecting his lesser ones.

3. Concentrate for the decisive blow, so as to strike with the whole force available, wasting no strength in subsidiary theatres, and detaching as little force as possible for secondary objects, where success is not directly material to the main issue, and where defeat will be redeemed by the main victory.

4. Plan and act therefore with the exclusiveness of purpose which, as Napoleon wrote to Decrès, is the secret of success in war. Never aim at more than one objective, neglecting all others however tempting, and especially if they are merely local and territorial. Keep to the plan once formed, for change and vacillation are fatal to success.

- 5. Act with the greatest possible resolution and energy. When striking, strike hard. Hesitation and delay blunt the edge of victory.
 - 6. Pursue relentlessly after victory.
- 7. Gain time on the enemy by rapidity of action and by surprise. The great leader trains his force to the utmost mobility, and is pregnant with expedients of ruse and secrecy.

Above all, realise the enormous importance of men over material, and estimate the moral factor at its true rate. Therefore, omit nothing that can mystify and mislead the enemy and impress his commanders and men, or inspire your own.

Such are the principles of Strategy, but some of them are woefully disregarded by the public, too ready to believe in scare-mongers, and steeped in local prejudices. Many authorities on Naval Strategy have dwelt on the evils thereby entailed. Mahan, in his Sea Power in History, p. 38, speaks of "the ignorance and presumption of amateur

naval strategists," of which press and politicians often afford shocking examples. Sir George Clarke wrote: "The functions of the Navy in war are imperfectly understood. To attain full comprehension of their nature in war requires an amount of study few can undertake, and powers of imagination in which we are singularly deficient."

The importance of good strategy cannot be overrated. Without it the best tactics and fighting will be barren of result. With it the effect of victory is doubled, and the harm of defeat minimised. As Mahan says, "A strategical mistake is far more farreaching in its effects than an error in tactics." Moltke has said the same thing.

The direction of the British Navy in the past wars has on the whole been in accord with the principles of strategy. Examples of concentrating force, of operating against the enemy's main fleet, of taking the offensive, of acting with vigour, are to be found throughout British naval annals. Mahan's

¹ Influence of Sea Power, vol. i. p. 160.

classic volumes illustrate the far-reaching effect of the naval superiority so attained, and show how France, on the other hand, in her long wars with England "failed by subordinating the attempt to gain superiority at sea by attack, to furthering some special strategic operation connected with a particular locality."

Some have thought that steam and telegraphy may have made the teaching of the past no longer a guide to the conduct of war at sea in the future. But on consideration it will be seen that the chief effect of steam is to shorten voyages, and to produce a certainty in them which was unknown when they depended on the direction of the winds and were impeded by bad weather. The movements of ships will thus be more punctual, as well as far more rapid. At the same time, the information of the enemy's situation, on which these movements are based, will be more recent and reliable, owing to telegraphy. The effect of both steam and telegraphy on strategy is therefore that plans can be made with less uncertainty, and that their execution will be less liable to miscarry. These modern conditions on the whole thus tell in favour of the navy which is waging offensive war, and has the initiative.

The nature of Strategy is not changed, although the operations by which it is now practised are more certain and rapid. We may be sure that a Nelson, or a Napoleon, waging war to-day, would make as astute a use of modern conditions as he did of those of his day, and would outmanœuvre and outfight his antagonist as brilliantly as of old.

CHAPTER IV

NAVAL WAR

"Great is the power of the Sea."—Thucydides, i. 143.

In order to gain the superiority at sea which is the first essential object in naval war, it is obviously of the utmost importance that England should, in the first place, possess a stronger fleet than that which her enemy and his allies can possibly bring against her at one time—stronger not only in ships and guns, but in leaders and men, in moral quality and professional training; ¹ and, in the second place, that this fleet should be so stationed as to be readily concentrated before the enemy can attack any portion of it. ² It is to England's interest that success in the first battle should be overpowering, and should be attained without delay.

¹ See Chapter VII. and Appendix D.

² See Chapter XX.

It is, however, probably only by finding an ally in another Naval Power that any nation could expect to overcome Great Britain. But alliances are notoriously subject to inherent weakness. The allies are only united by political interests of the moment, and coalitions are cankered by national jealousies and divergent political aims, so that they act with the hesitation due to divided counsels and want of mutual confidence. The weaker nation is afraid of its partner, and almost dreads the success which will strengthen him. A naval coalition formed to attack England will suffer from the fact that its component fleets will at the outset be in a state of dispersion detrimental to effective strategy, and offering advantage to a concentrated navy, centrally situated like that of England. They will move less promptly, owing to loss of time in deliberation, and the absence of one control and a common doctrine of war. The strategic objective may not be identical for both allies; their plans may conflict, and harmony of action can only be obtained by concessions on one side which may entail the adoption of inferior strategy. When brought to battle, allied fleets, with no common system of signals and of tactics, will be at a disadvantage against ships trained to concentrated action. For such reasons the effective strength of a coalition will be far less than that of an equal force belonging to one nation.

The British Navy, on the other hand, under one directing brain, and having no ally to consult or persuade, can act without loss of time and with a vigour and decision impossible for a coalition. Its movements and combinations will be more rapid and better timed, and therefore more effective.

As long as the British Navy is kept up at a proper strength, it should defeat its possible enemies in the first fleet actions. The result will be that the enemy will be overwhelmed, or at least lose several ships, in which case the victor will follow up his advantage by successive blows, and thus

further weaken his antagonist. Before long the weaker fleet will be unable to continue the conflict, and will take refuge in its fortified ports. In this way the superior fleet of Great Britain should be able eventually to drive the enemy's main strength off the sea, and will have attained what is called Command of the Sea.

We must now turn to the not unlikely case where our enemy may be so conscious of inferiority that he will avoid engaging, hoping to get later a chance of favourable encounter with a portion only of our force, or to gain time till a junction can be effected with an ally. This must, however, in the long-run result in his having to retire to his ports, unless he faces a fleet action. As the German General Bernhardi says of the German Navy attacked by the English, "Nothing would be left for us but to retire with our war fleet under the guns of the coast fortifications."1

¹ Germany and the Next War, English translation, p. 160.

An enemy's unbeaten fleet lying behind batteries in his fortified ports presents a difficult problem to deal with. The moment at which he may decide to come out cannot be foreseen, and the stronger fleet must be ever ready to meet him when he does. This will entail its taking up a position so that he can be watched, and when he emerges be brought to action by superior force. Such an attitude is often termed naval blockade, but wrongly, for the desire of the superior fleet is that the enemy should come out and fight, and not at all that he should be blockaded, or kept in. Every effort will be made to lure him out, either by presenting a weakness that may tempt him, or by attacks on his trade, coasts, or colonies, which may compel him to come out to protect them.

Until, however, the enemy emerges, and can be brought to action, it is necessary to keep watch on the ports where he lies. Although this will not now be done by battleships, but by scouts, destroyers, or

submarines, it must entail the hardships and strain of keeping the sea continuously in all weathers, which were the lot of the British Navy during long years in the great French wars. At the same time, as long as the enemy's fleet stays in port it is useless and harmless, and its sea-efficiency and moral are deteriorating. Until it decides to come out its antagonist is nearly in as good a position as if he had destroyed his enemy's naval power. But this will only be a temporary advantage, and the situation will be one of unstable equilibrium, liable to disturbance, if the enemy's fleet in port is morally effective, and is only waiting a good opportunity to come out and fight. Should it, however, have retired behind fortifications owing to its hopeless weakness, or because it has been crushed by defeat, and have no hope of reinforcement from allies, little inclination to come out and fight, and small chance of success if it does, the British Fleet will practically have gained Command of the Sea.

This term means that the enemy, being

too weak to dare to send his fleet to sea, can no longer interfere with the movements of British ships. England will thus be able to move her ships freely over the seas, while her enemy cannot. In technical parlance Command of the Sea means "control of sea communications," giving freedom of movement to British ships, while denying it to those of the enemy.

It should be noted that Command of the Sea is a state of things only required, and existing, during war. It can only be attained by fighting for it. The popular use of the term in peace is meaningless. No Power commands the sea in peace. In war the command of any particular ocean can only be obtained by fighting and defeating the enemy's navy which may dispute it. The result of this fighting will depend entirely on the relative fighting power of the two fleets engaged, and not at all on the locality of the encounter, or on its relative proximity to the country of one of the combatants. As Sir John Colomb wrote in

his book *The Navy*: "Command of the sea is lost or gained by line-of-battle operations, and by nothing else. All other operations or incidents of war on the sea are minor and subordinate to those determining the main issue."

The recent concentration of the main British fighting force in the North Sea is misunderstood by the public. It was made in order to meet the force of that one of our possible enemies who looked most threatening, and might come first into action.1 Such a peace distribution of naval force is no surrender of the "command of the sea" in other regions, as is sometimes stated. Sea Command is non-existent in peace, and its surrender in war could only result from a refusal to fight an enemy in some particular ocean. Even in that case the Command of the Sea would be undetermined, and not gained by the enemy until he had brought our fleet to action and defeated it.

¹ See Chapter XX.

The sea is all one, and local command of any portion of it, by a navy which is not proven to be superior to its enemy, can only be accidental and temporary. Such local command will be lost when a superior force arrives to dispute it. War alone raises the question of who commands the sea, which relative naval strength alone can decide. As Mahan says: "It is naval power that in the end decides all ulterior objects of a war, such as control over distant regions, defence of possessions, support of allies."

The Command of the Sea once obtained by England, she will have the control of sea-communications, from which two results will follow—one defensive result, security; one offensive and positive result, freedom to strike. Each of these results flowing from Command of the Sea may be looked at in two aspects—as bearing on trade afloat, and on the movement of troops oversea. The defensive effect of the control of sea-communications ensures safety for British trade afloat, and safety for British military

expeditions during their passage over the sea. The offensive effect, on the other hand, debars the enemy from using the sea. It stops his trade, cuts his communications with his colonies and with his squadrons acting abroad, and forbids his moving military expeditions across the sea to attack any part of the Empire.

When Command of the Sea is assured, the Sea and Land Forces of the Empire can be directed against the enemy anywhere, and British sea-borne trade can pass without interruption, while that of the enemy will cease, and any offensive efforts on his part against the Empire will become difficult. As Sir George Clarke says, "The unbroken teaching of the past shows clearly that oversea expeditions, sustained operations on an enemy's coastline, and blockades, are impossible to a Power which is unable to assert and maintain Naval Superiority." 1

The truth of this remark is amply borne out by history. Our enemies being inferior

¹ Fortification, p. 170.

at sea, British coasts have never suffered from such operations, which have, on the contrary, been the constant practice of the superior British Navy against our enemy's coasts, colonies, and trade. Their effect can be seen in the growth of the British Empire from its small beginnings in the seventeenth century into what it is to-day. This expansion has been either the direct effect of oversea conquests, or the result of the opportunity presented, and the subsequent protection afforded, to peaceable colonisation, by Sea Power.

It is usually believed that without a field army available for Continental war England will be powerless to help her allies or to bring force to bear on the enemy on land. But this view overlooks the many instances in British history of most effective interference with the war policy of our enemies, and assistance given to our allies, due to the British Fleet alone, unassisted by military force. In many cases the effect produced was quite as great as could have resulted from

a successful land campaign, and far more rapid and economical in life and money.

In 1735 a British fleet sent to Lisbon averted the Spanish invasion of Portugal. In the West Indies in 1740 the Fleet took Portobello, and in 1748 Port Louis, from Spain. In 1807 it captured the Dutch islands in the West Indies.

In the Baltic, the Fleet by itself protected Sweden from Denmark in 1715 and Denmark from Russia in 1716; made Russia withdraw her invading force from Sweden in 1719; defended Sweden against Denmark and Russia in 1720; stopped Russia's threats against Denmark in 1726, and against Sweden in 1727; destroyed the Danish Fleet in 1801 to prevent Napoleon acquiring it; produced considerable effect in the Gulf of Cronstadt in 1855, by retaining Russian forces in the north.

In the Mediterranean the British Fleet, acting alone, captured Gibraltar, 1704, and in 1719 cut the communications of Spain with Sicily and Sardinia, causing her to

evacuate those islands. In the next war (1742 to 1746) England assisted Austria by the operations of her fleets; prevented a French invasion of Northern Italy; threatened Naples, and caused its king to withdraw from the war; overawed Genoa, Naples, and the Pope into neutrality; and assisted the Austrians to capture Genoa. The British Fleet captured Malta from the French in 1800; helped to defend Acre against Napoleon in 1799; bombarded Algiers in 1816, and brought Barbary piracy to an end. The Fleet of Great Britain, with those of France and Russia, destroyed the Turkish Navy at Navarino in 1827, and established the independence of Greece. In the revolt of Mehemet Ali against his Suzerain, the British Fleet's operations on the coast of Syria, notably the bombardment of Acre (1840), saved the Sultan from being overthrown by his vassal.

There followed in recent times the entry of the British Fleet into the Dardanelles in

1878, which stopped the advance of the victorious Russians on Constantinople. In 1880 the Fleet took the lead in the European demonstration off Albania at Dulcigno, which coerced Turkey into observing the Treaty of Berlin. In 1882 the Fleet bombarded Alexandria, and paved the way to the British occupation of Egypt. In 1886 the Fleet peacefully blockaded Greece, and prevented her from attacking Turkey and suffering the defeat she rushed to some years later.

In most of these cases the effect was produced by the British Fleet without firing a shot. But silent pressure of the Navy on the policy of other nations has also constantly been at work during peace, almost unnoticed owing to its very success in averting war. It was only British naval supremacy that allowed England to have her way in Egypt in 1882 without interference. It prevented other nations from stepping in to stop American action in Cuba in 1898, or our own in South Africa.

It played a large part in the success of the diplomacy of Sir Edward Grey in keeping Europe at peace during the Balkan struggle. The benefit to England of a strong Navy cannot be measured only by its effect in war. Its effect in peace has been more constant, and more beneficial by averting the evils of war.

CHAPTER V

PROTECTION OF TRADE AFLOAT

"Whosoever commands the Sea commands the trade; whosoever commands the trade of the world commands the riches of the world, and consequently the world itself."—SIR WALTER RALEIGH.

ONE of the most important functions of the Navy is the protection of British trade afloat. The whole commerce of the Empire, except that between Canada and the United States, is carried by sea, and its amount is enormous.

The British flag covers half the steam-ships of the world, and three-fifths of those of 10,000 tons and over. The total value of British merchant ships is at least £200,000,000. The amount of trade carried by these ships is shown in Appendix C. Besides the trade of the United Kingdom, £1,344,000,000 in 1912, there

¹ See Appendix B.

is also the considerable trade of India and the Colonies with each other, and with foreign nations. In addition, British ships are engaged in carrying a great amount of trade for foreign nations, including half of the whole trade of the United States, more than a third of that of France, and more than a quarter of that of Germany.

This enormous volume of trade must be so guarded by the British Navy that it may continue to flow across the sea in time of war, as it does in peace; its shrinkage would mean poverty to most British subjects, ruin to some. Anything approaching its stoppage must dissolve the economic frame of society. The security of British merchant ships during war is vital to the credit and prosperity of the whole Empire, and is therefore one of the main objects of Imperial Defence, and not less important than the security of British territory.

The protection of British trade afloat is by no means impossible. It has always been sufficient in past wars. Under Lord

Chatham's direction of the Seven Years War our trade actually increased by 7 per cent., and under his son's conduct of the French Revolutionary War by 8 per cent. In future wars the security of trade is not likely to be less complete. The privateers who used to ravage trade in our home waters are now abolished by international agreement. The number of foreign cruisers available to attack British trade is less than of old, and, what is even more noteworthy, the time available for the cruisers to act has been reduced from months to days, as will be explained later. In short, while the number of British merchant ships has greatly increased, the means of attacking them have been diminished, so that the number likely to be captured in war will bear a far less proportion to the whole than it used to. In fact, the present enormous volume of British trade, so far from being more difficult to protect, is positively a guarantee that its losses will be a smaller percentage of its total, so that depredations on it will have less

effect than of old on national prosperity. Commerce-destroying is therefore not likely to be more efficacious as a method of war against England than it was in past wars, where it always failed to effect vital injury.

History gives no support to the idea that a superior naval power can be much injured by attacks on her trade at sea. This is due to the fact that the inferior navy cannot pursue a policy for long, or very effectively, for want of naval support. As Sir George Clarke says: "History clearly shows that effective war against commerce can only be carried out by the belligerent whose battlefleets are either victorious, or able effectually to control those of the enemy." Admiral Mahan explains the reason of this more fully: "Cruisers cannot act far from their base, either home ports, or fortified outposts afloat or ashore, that is fleets, or distant coaling stations. Unprovided with such support a cruiser can only hold its own on its cruising ground precariously and for a limited time" (Sea Power in History, p. 132).

This principle still rules to-day, but its scope is immensely increased by two modern developments-wireless telegraphy and steam. A ship chased by an enemy can now call up the nearest British cruiser, and also warn other ships within reach to evade the danger. Hostile cruisers are thus more easily located than of old, and the effect of wireless is to make their pursuit more certain and rapid, and therefore their depredations less.

Steam, by replacing dependence on winds, has made trading voyages shorter. ship, moving rapidly, spends less time in dangerous sections of her voyage. Steam also allows the ship to take a direct and much shorter course. Steam has also made the movements of our protecting cruisers more rapid and certain, now that they are no longer dependent on the winds. For the enemy's cruisers preying on our ships this advantage ceases with the exhaustion of their coal. Our cruisers can coal with certainty at defended ports conveniently situated all over the world. The enemy's cruisers, as Admiral Colomb remarked, "must commonly load with coal in neutral ports, in short measure, and in haste and fear." If a collier accompanies the cruiser her speed and chance of evasion will be reduced. If sent to meet her at some point the collier runs risk of capture. She will not often be so lucky as to capture a coalladen ship. In any case, if coaling at sea is attempted, the cruiser runs risk of being attacked at disadvantage while in the act. No enemy possesses many coaling stations of his own, and they should be captured early in the war. Herein lies an opportunity for enterprise by the forces of an adjacent Dominion.

The only other hope of being able to keep at sea lies in the cruiser finding undefended British coal-stores to raid. But there should be little coal stored in undefended British ports, as the usual coaling ports for merchant ships are British defended naval bases or coaling stations.

In days of sail a cruiser could keep on

her station for months. Now she can only carry coal to last her for two or at the most three weeks. Much of it will be used in proceeding to the cruising ground, while enough must be kept in hand to get back with. The amount available for cruising is therefore but small, and the high speed needed for chasing consumes coal extravagantly. The time which can be devoted to preying on commerce is therefore limited to a few days, unless coal can somehow be procured. A hostile cruiser will thus have but a comparatively short and hazardous career of commerce-destroying. Even if she evades capture by speed, skill, or luck, she will eventually be driven off the trade route, and find herself in waters barren of ships to take. Thus in war our trade will be safer than of old. Steam has reduced the hostile cruiser's range of action, and greatly lessened her power of capturing merchant ships.

In support of this view, we may quote General Bernhardi, who writes in his book

Germany and the Next War (p. 160 of the English translation): "Even war against British commerce holds out less prospect than formerly. Our auxiliary cruisers (converted merchant ships) could do little, while our foreign service warships would soon have to set about attacking those of the enemy before coal ran short, for to fill up the coal-bunkers of these ships will certainly be a difficult task. . . . No very valuable results can be expected from a war against England's trade. On the contrary, England, with the numerous cruisers and auxiliary ones at her disposal, would be able to cripple our oversea commerce."

The protection of British commerce afloat is fully appreciated by the Admiralty, and for years past special arrangements have been prepared to come into play on the outbreak of a naval war. These will not denude our battle-fleets of the cruisers they require for scouting, as we have a larger number to spare for that purpose than is possessed by our possible enemies. In peace

a number of British cruisers are kept on their war stations, so as to lose no time in protecting trade, and they are stationed to guard the sea areas where trade routes converge, and where trading ships will therefore be most numerous.

These areas will be found where the configuration of land makes the courses of vessels certain within narrow limits, as in rounding the Cape or Ceylon, or in passing the Straits of Gibraltar and Malacca, or between the islands of the West Indies. In the neighbourhood of every great port trading vessels will be numerous; such fertile areas lie off the entrances to the Suez Canal, and New York, Buenos Ayres, Bombay, Calcutta, Hongkong, Sydney, Melbourne.

But the most crowded seas of all will be the approaches to the British Isles—the Channel, the Irish Sea, and the North Sea. Here lie the points of departure and arrival of most British commerce, and here will be afforded the strongest protection to trading ships. In the waters of approach are strong cruiser squadrons with outlying cruiser patrols, to guard the great stream of trade converging on, or diverging from, Great Britain, by forbidding these seas to the enemy's action.

These squadrons are supported by the Home Fleets, whose station is in rear of them, which will make it impossible for the enemy to drive them away by a superior squadron. Similar dispositions on a smaller scale will guard the other sea-areas fertile in trading ships.

These arrangements make it evident that hostile cruisers must go further afield to prey on British commerce. Being kept off the more crowded areas everywhere, they can only capture ships by stationing themselves on the trade routes between, whose position is now more definite than when varying winds made courses of ships uncertain, whereas steamers follow the shortest routes. It is now more easy and certain to locate and pursue hostile cruisers, and they

will be too busy eluding capture to pay much attention to British merchant ships.

On the other hand, England, with more cruisers and stronger squadrons to support them, has also the advantage of coaling and docking facilities to enable her ships to keep the sea, as has been pointed out. From the outbreak of war her ships will be hunting down the enemy's cruisers, which will before long be captured, or driven into port, where they will be confined by blockade. The sea will then be clear of the enemy, except so far as a cruiser or two may from time to time evade blockade and elude pursuit for a time. The enemy's merchant ships met with will also be captured by the British cruisers, and his trade diminished, while that of Britain will continue. It may even grow larger, owing to the extra trade which must be carried by British merchant ships when those of the enemy are debarred from the carrying trade of the world.

The question of the safety of our trade in war was thoroughly investigated by a Com-

mittee on "National Guarantee for War Risks of Shipping," which reported in 1908. It was there pointed out, among many other favourable considerations, that British imports are drawn from widely scattered sources, which diminishes the possibility of producing scarcity by capture. A Royal Commission on "the Supply of Food and Raw Material in Time of War" reported in 1905 that there was "not only no risk of stoppage of supplies, but that no material reduction in the volume would take place." The beneficial effects of "the stimulus likely to be caused to importers by the rise of prices," and of "the existing state of international law," were alluded to. One point may be noted, that a cruiser can spare few men, and a destroyer none, to take prizes to port, and may have to destroy them, in which case the crews, and possibly passengers, captured will be a serious incubus to the captor. He cannot well sink the vessel with all on board, nor like a pirate make them "walk the plank," but must crowd them on board

his ship or send them to port in one of his prizes.

Protection to British trade will be best afforded by concentration of force, and "keeping the enemy's cruisers continually on the look-out for their own safety," as Sir Cyprian Bridge puts it. Hence the desirability of combining the cruisers of the Dominions with those of the Navy into squadrons under one direction, and in close touch with the Admiralty, and with the Commanders-in-Chief of naval stations, for communication of intelligence and orders. This again emphasises the impotence of local ships tied to their own coasts, as some illinformed opinion in the Dominions seems to desire. In this connection it must be pointed out that the same cruisers which keep the enemy off the trade routes can hardly fail to make it difficult for any hostile expedition, and impossible for a large one, to pass over thousands of miles of ocean and reach a distant Dominion of the Empire. Protection of trade cannot fail

at the same time to be the best protection of territory.

But besides safeguarding territory, the action of the Navy in protecting trade is of direct value to the Dominions of the Empire, whose products have to cross the sea to reach their markets. As Mr Asquith stated in 1913, a fourth of England's imports is exported from the Dominions and Colonies, and a third of her exports received by them. In the safety of this trade, amounting annually to four hundred millions sterling, and all passing over the sea, the Dominions are vitally interested. They can hardly exist without the imports they require, and certainly not without finding a market for their own exports. To this must be added a vast trade in which England is not directly interested, that of the Dominions and Colonies with each other, amounting, Mr Asquith said, to seventy millions more. He might have added the growing trade of the Dominions with other countries, of which the Australian foreign wool trade is a notice-

able example. England provides the cruisers to protect all this Colonial trade, as well as the battleships which support them. This ought to convince every dweller in a British community abroad of his vital interest in the British Navy. No Dominion can by its own efforts safeguard its trade on the high seas.

It may confidently be expected that, on the whole, adequate protection will be afforded to British trade at sea. Admiral Sir Cyprian Bridge says: "I believe that the Navy is strong enough, of course on the assumption that it is properly distributed and prepared for prompt action, to protect our ocean trade as effectually as it was protected in all former wars."

It is true that this protection can never be complete. As Sir George Clarke says: "The attractions presented by the vast volume of British maritime trade are so strong that organised attacks on it must be expected" (Fortification, p. 181). Our blockading squadrons will not always be able

to prevent the occasional escape of a hostile cruiser from a blockaded port, and the safety of every individual merchant ship cannot be ensured during a long war. We must therefore expect to lose a small percentage of our merchant ships; but this loss, however regrettable and inconvenient, can never amount to vital injury. Commerce destruction has often been vainly adopted by the inferior naval Power as the main operation in war. Such was the fallacious policy of France during the great wars of the eighteenth century. As Mahan remarks: "The attack on commerce is doubtless an important secondary object of naval war, but as a primary measure a delusion, and a most dangerous one. Especially is it misleading when the nation against whom it is directed possesses, as Great Britain does, the two requisites of a strong sea power, an independent healthy commerce, and a powerful navy" (Sea Power in History, p. 539).

CHAPTER VI

DESTRUCTION OF THE ENEMY'S TRADE

"The economic life of all nations is dependent on the Oceans. Continental nations are becoming more and more exposed to danger of damage by naval warfare."—Naval Warfare, by MALTZAHN (p. 128, English translation).

The protection of British trade afloat is closely connected with the destruction of that of the enemy. The same British cruisers which are engaged in guarding trade will be by that very fact stationed on the great trade routes in the best position to capture the merchant ships of the enemy. Both operations, protection and destruction of commerce, will be in progress simultaneously from the very beginning of a great naval war. When hostilities threaten, not only does the Admiralty note the position of each warship of the possible enemy, but

also the movements of his merchant ships, from day to day, so that their pursuit is facilitated. Those which may for a while evade capture will be eventually sighted at sea or from shore. Cables and "wireless" have made evasion at sea less easy than of old; steam has made interception more likely than when cruisers had to depend on shifting winds; coal is much more obtainable by British ships than by those of the enemy.

As soon as war breaks out a mercantile blockade will in effect be established by the British Navy against the ports of the enemy. This blockade will prevent the ingress or egress of all his vessels and those of neutrals trading with him; it will also tend to hamper, if perhaps not altogether stop, his commerce-destroying cruisers in getting out, or flying to port when pursued. They will have then no refuge but in neutral ports, where they will be interned during hostilities, like the Russian cruisers in Chinese and American ports during the war with Japan.

Before long, the enemy's trading ships at sea will be taken, and the risk involved will deter others from going out, so that his own oversea trade will cease, while that carried on with him by neutral vessels will be stopped by the blockade of his ports. No goods will then leave or enter his country by sea. A continental country can, of course, still send or receive by land, but the change of route cannot be easily effected, and the cost of transit by rail will be prohibitive for a large class of goods.

The effect of even a partial stoppage of trade will be severely felt. To cripple our enemy's sea trade is to reduce his cash and credit, which are essential for carrying on the war and all private business. The flow of capital will cease. Factories and business houses will close down. Panics and failures will ensue. Business once lost is not soon or readily recovered. The effect on Germany has been thus foreshadowed by General Bernhardi: "Let us imagine the endless misery which a protracted stoppage or

definite destruction of our oversea trade will bring on the whole nation, and in particular on the masses of the industrial classes who live on our export trade." It is likely that much pressure to stop the war will be brought to bear on the Government of the country so affected. Commerce and finance more and more assert their power to control policy.

¹ Germany and the Next War, p. 239, English translation.

PART III FACTORS OF SEA-POWER

CHAPTER VII

MORAL FACTORS

"The Sea was their element; traffic by Sea the great source of their wealth; ascendancy on the Sea the great object of their ambition."—MACAULAY'S History of England, vol. v. p. 23.

The one factor of Sea Power usually thought of is the strength of the British Navy in battleships. It is not proposed here to enumerate the ships which compose the Navy, or to compare them with those of other naval nations in numbers and efficiency. From the rapidity with which new ships are added to navies, and old ones become obsolete, any such comparison has but a temporary value. It may suffice to say that in 1914 the British Navy is greatly superior

to any other in all classes of ships, and may be looked upon as hardly inferior in total strength to the navies of the next two greatest Naval Powers, Germany and the United States, and superior to those which any coalition at present at all possible could bring against the British Empire. It is the intention, definitely stated by the responsible Minister, to keep a superiority in battleships of 60 per cent. over the next greatest Naval Power. Of cruisers, England has always kept up far larger numbers, and is well provided with destroyers, torpedo-boats, and submarines. No Government would dare to allow her naval strength to fall off. The English people have always been in deadly earnest about their Navy.

Naval strength, however, does not depend, as is generally assumed, entirely, or even primarily, on numbers of ships. There can be too much of what Admiral Custance has called "the present rage for material superiority." As Mahan says: "Historically, good men with poor ships are better than

poor men with good ships."1 Relying on the staunchness of her sailors, and on Admirals rightly styled "Uncrowned Kings of the Sea," England has often begun a naval war, and won some of her greatest victories, with inferior strength in ships. The Sea Power of Great Britain possesses deeper roots in the efficiency of the officers and men of the Navy, in its spirit of duty and discipline, and in its traditional instinct for the attack, regardless of odds. The British Navy has an almost unbroken record of success, with all this implies in the way of confidence and prestige. Victory has been gained partly by superior strategy, tactics, and training, but more by the selfreliance, resource, and energy of British seaofficers and their men.

The secret of England's power in war lies, however, not merely in the strength of her Navy, but in the fact that it is inspired by the nation's confidence, and supported by a maritime population, by a great mercantile

¹ Sea Power in History, p. 102.

marine, and by unrivalled shipbuilding and mechanical industries, with skilled brains to direct and trained hands to work. All this is backed by vast resources, high credit, and sound finance, which, as Mahan justly observes, are true elements of naval strength. But above all, the strength of Great Britain lies in the tenacity and resolution of a self-reliant people, historically gifted with the instinct of Sea Power.

Mahan has thus summed up the advantages of England: "the possessor of actual and yet more of reserve strength in the genius and pursuits of the people, in a continuous tradition which struck its roots far back in a great past, and above all in a body of officers steeped to the core in professional habits and feelings." 1

The moral factors of naval supremacy, although very real, and of the first importance, cannot be exactly weighed and set down in words and figures as can be the more material factors which also con-

¹ Influence of Sea Power in History, p. 69.

tribute to the Sea Power of Great Britain. Obvious and important as are the latter, it must never be forgotten that the moral qualities of the personnel of the Navy are those which win in war, and that numbers and material superiority are secondary. The whole history of war, by sea and by land, brings out this fact with overwhelming force.

Apart from moral, the other contributing causes of British Sea Power may be briefly considered under the heads of personnel, matériel, and strategic factors.

The numbers of the personnel of the Navy are now (1914) 146,000, including officers, and 16,000 marines. This number, which will be largely increased in the next estimates, is double that of the next greatest navy, and more than equal to the numbers of the two next greatest. It enables England to man her whole Navy for war with the personnel serving in peace, without drawing on her reserves. Other nations make up their complements to war strength with

reserve men, and in peace keep their reserve ships out of commission, while the reserve squadrons of Great Britain are kept in commission with three-fifths of their complements. It may also be mentioned that the physical and educational standard for men joining the Navy is very high.

Besides the permanent personnel, always serving, there are considerable Reserves, of which the most important are the Coast-guards, some 3000, and the Fleet Reserve, 26,000 strong, both comprising only men who have served in the Navy. There is also the valuable "Royal Naval Reserve," some 18,000 strong, composed of officers, sailors, and stokers of the mercantile marine, and of fishermen. There are also the "Naval Volunteers," some 4000 civilians of nautical predilections and experience.

The British Navy is manned by volunteers drawn from a seafaring class, and they serve for twelve years for the most part. The United States has voluntary service, with enlistment for three years, but other nations

man their navies by compulsory service of only three years. The United States, Russia, and Germany have to draw largely on landsmen, owing to the deficiency of seaboard population. Thus Britain has the great advantage that in her warships the proportion of men with only one or two years training is less, that most of her men have been longer at sea, and that her main reserve has had longer service training, than in foreign navies. British sailors are therefore older, stronger, and more inured to the sea, and more resourceful afloat.

CHAPTER VIII

SHIPBUILDING AND REPAIRS

Great Britain holds a supreme position in shipbuilding. She possesses a steam merchant marine (12,242 ships of 10,700,000 tons in 1911) equal in numbers and tonnage to that of all other countries, and with more of the larger, newer, and faster ships. England also builds largely for foreign customers, as she excels in quality, cheapness, and rapidity of construction.

She also leads in building warships, whose designs are adopted in other navies. There are in Great Britain, besides several Admiralty dockyards, a number of private building yards, where the output of warships, always great, can be, if needed, vastly increased. As long ago as 1896, Lord Brassey stated in the Naval Annual that "our shipyards are equal to the construction of 25 battleships

and 75 cruisers, besides smaller craft, at one time."

An idea of the activity of British warship construction may be gathered from a remark of the First Lord of the Admiralty in the House of Commons, 17th July 1913, that "we are due to receive on the average a Super-Dreadnought every 45 days during the next eighteen months; a Cruiser every 30 days during the next twelve months; a Torpedo-boat Destroyer once a week for the next nine months; besides a very large delivery of Submarines."

Two points add greatly to these advantages—rapidity and economy in shipbuilding. England builds warships in shorter time than other nations. The *Dreadnought* was commissioned in 14 months from the time she was laid down, and the latest battleships have been completed in from 24 to 30 months, and Light Cruisers in 20 to 22. The Admiralty require battleships ordered in private yards to be delivered in two years, which allows some 600 days of

work—a very rapid rate, necessitating over 2000 workmen being employed simultaneously on the ship all the time. Germany takes 36 months to build a battleship; France and Austria quite as long; the United States rather less; Italy and Japan 42 months; and Russia still more.

The advantage of quick building lies in the fact that England can, without being outbuilt, note the numbers and types of ships begun abroad for foreign navies, and thereon settle her own building programme. Thus our newer ships embody the latest ideas, while those of our possible enemies will be slightly out of date when launched. Rapid building also clears the yards for fresh work, which may be of great importance in war.

Economy in construction is a feature of British building, owing partly to good organisation and efficient workmanship, partly to experience, and partly to Free Trade, which allows us to buy the material which goes to make up a ship at lower

rates than abroad. We therefore spend less on every ship, or obtain more value in ships for a given expenditure, than can other nations.

A German writer, quoted by Sir George Clarke (Imperial Defence, 1897, p. 120), estimated that £32 spent in England gave the equivalent in shipbuilding to £39 spent in Germany, £40 in Italy, £49 in France, £96 in Russia, and £100 in the United States, although in Europe hours of workers are longer, and their pay less, than in England. But this comparison no longer holds good, at any rate as regards the U.S.A. and Russia.

On 25th October 1912 the Admiral in charge of the Austrian Naval Department told the Committee discussing Dreadnoughts that "the difference in their cost was due partly to the lower price of iron in England and partly to the greater efficiency of the British workman."

The policy of the Admiralty is constantly directed not only to creating means for

keeping up and adding to the ships of the Navy in peace, but also to rapidly repairing and increasing them when required. This gives Britain unrivalled power of recuperating material strength during a prolonged war, and will form an important asset of our naval supremacy in the long-run. To be able to keep up strength during a prolonged war may be as essential as to possess it at the outset. Whatever losses England may undergo in fighting, the process of wearing down her naval strength must be a slow one. With her rapidity in construction, her building resources, and her wealth, England can recuperate her Navy by repairing gravely injured ships, and producing new ones, as no other Power can. Time cannot fail to tell in our favour as the war goes on. The advantage in prolonged war lies with the nation which possesses a number of dockyards and building yards, public and private owned, and of factories for turning out engines, machinery, guns, mountings, armour-plates, ammunition, and all the multifarious fittings of ships. All this constitutes a latent reserve of material strength in naval war, when equipped with experienced designers, able managers, and an army of skilled workers.

England is far better provided with these resources than any other country. Besides three large and two smaller Royal Dockyards, and the Royal Arsenal, there are a great number of private firms able to turn out ships of war and all they require in the way of armament and machinery. All these yards and works are supported by long experience in such business, and by the trained industry of a great manufacturing country. The Admiralty always keeps private firms occupied with naval orders, and the skill and success in building thereby developed are made full use of by other nations, so that vessels are always building in England for foreign governments.

Battleships can be built in the Royal Dockyards, of which the chief are Chatham,

Portsmouth, Devonport, and Pembroke, and in nine private yards—Vickers at Barrow, Cammell at Birkenhead, Armstrong, Swan Hunter, and Palmer on the Tyne, and four on the Clyde. Guns and their mountings are constructed at Woolwich Arsenal, and by the Coventry Ordnance Co., Vickers, Armstrong, and Beardmore. Armour-plate is made by the last two firms, as well as by three at Sheffield—Vickers, Brown, Cammell. Machinery is not made in Royal Dockyards, but, including most of the above firms, there are eleven firms who undertake it.

A rough idea of the cost of building modern ships may be worth giving. The cost of the latest battleships and battle-cruisers is nearly two millions sterling. Of the total cost, the armament accounts for nearly a third in the battleships, and a quarter in the battle-cruisers; the machinery for a quarter. The upkeep in commission does not greatly exceed that of the "pre-Dreadnought" battleship of half the present efficiency.

CHAPTER IX

STRATEGIC FACTORS OF SEA POWER

The primary condition under which alone warships can keep the sea is a supply of coal at hand when needed. The consumption is great, especially at high speed, and the coal capacity of a ship is limited. The problem before a Naval Power at war is a double one: how to procure coal, and how to get it to the ships.

As to the first point, England finds in the coalfields of South Wales a great supply of steam coal, which, being shipped from Cardiff, is known as "Cardiff coal." This is superior in steam production and smokelessness to any other. It thus gives warships using it the advantages of greater speed and secrecy of movement, with less work on board, as it is hard, clean, free-burning,

and leaves little ash or clinker. The export of Cardiff coal is some eighteen million tons per annum, and the Admiralty uses to-day a million tons of coal from twenty-six different mines. The Empire is also exceptionally favoured by having coal mines well distributed abroad on every ocean, viz. Nova Scotia in the Atlantic — Natal and India in the Indian Ocean—Labuan in the China Sea—New South Wales and New Zealand in the South Pacific—Vancouver Island in the North Pacific.

On the other hand, foreign nations have no coalfields in their colonies, and few coaling stations. Outside England there is no good steam coal; that from Westport, N.Z., and Pocahontas coal in the United States, are the only coals at all fit for naval purposes as substitutes for "Cardiff." Most of the coal produced in other countries is not very suitable for ships. Foreign navies must therefore mainly rely on stocks formed before the war at great cost, or on a weak supply of inferior coal.

As regards the second point, how coal is to reach the ships, it may be drawn either from the stock at a coaling station or commercial port, or from colliers which accompany the warships, or rendezvous with them at a designated point. This point may be any sheltered anchorage in the waters of the enemy, or of a neutral, if benevolent. Failing this, the warships must coal at sea, which is never an easy or rapid operation, and not always practicable. It is generally effected by the boats of the warship, or when possible by the colliers coming alongside the vessel.

The Admiralty are introducing floating coal depôts to form extemporised coaling stations. One with a frontage of 1000 feet, and twelve coal transmitters, has been built.

But it must not be supposed that coal can be continuously provided from coaling stations. The quality, too, of the coal falls off by storing, especially under a hot sun, so that it will give a knot or two less speed than fresh coal. In war this will be an

important point to the navy which gets its coal direct from the mine. Want of accommodation, and the waste and expense, forbid the provision in peace of any very great stock of coal, which can never be anything like the amount which the squadrons abroad will need in war. On the outbreak of war the coaling station will therefore soon be depleted by the first calls on it, and practically all the coal which the navy will require during prolonged operations can never be stored beforehand in coaling depôts, but will be in the coalfields at the outbreak of war.

During the campaign there must therefore be a continuous flow of coal from the mines to the coal depôts abroad, or, better, direct to the ships' bunkers, thus avoiding handling it twice and breaking it up. This necessitates a constant passage of colliers from the coal ports to all theatres of operation. Some will be directed to the squadrons, either at sea, or wherever sheltered waters make it convenient to coal:

some will go to replenish the coaling stations. It will thus be seen that the latter are not, as is commonly supposed, necessary for the use of our ships in war, but are rather conveniences for their supply.

Our cruisers engaged in keeping the enemy's cruisers from depredation on our trade have greater coal capacity than foreign ones, being capable of steaming 10,000 miles or more without replenishing with coal. Their mobility and scope of action are therefore greater, good assets in strategy; but in the long-run their usefulness depends on coal reaching them with security and regularity. This makes the safe passage of the colliers a necessity, which can be met if the trade routes of the Empire are kept open by our cruisers, the very object of their disposition over the ocean. safety of the colliers is part of the general commerce protection of the Empire. It is equally important to the whole sea-borne trade, whose flow is only made possible by finding coal supplies at ports of call.

These considerations show how little the safety of the coaling station bears on the security of coal supply, compared with the safety of the whole route of the colliers to it. It is of no use to protect the coal when stored ashore, unless we also protect the thousands of miles of ocean which the coal has continuously to traverse to reach the coal depôt. The safety essential for the long communications to the coaling port obviously implies safety for their last link—the port itself.

The supply of coal to the ships of a belligerent weaker at sea, and therefore unable to ensure that his colliers shall reach them in distant waters, will be uncertain and intermittent, and the action of his warships correspondingly cramped.

As to coal supply, therefore, England has an enormous advantage, which rests on her large supply of the best coal at home and in her colonial coalfields, in the number of her coaling stations and commercial ports, and in her naval predominance, which enOIL 83

sures the passage of her colliers. Her warships will thus be always ready to move, over the longest distances, and at high speed when necessary, without danger of running short of coal.

Oil is replacing coal for warships. British warships are already fitted to burn oil sprinkled on the coal, when high speed is required. Nearly all British Torpedo Boats and T.B. Destroyers are now oil-propelled, and the ships of last year's programme will also use oil only, which will raise the speed greatly—that of the Battleships to 25, and that of the Light Cruisers to 29, knots.

The advantages of oil over coal are great. Weight for weight, oil is more economical in raising steam, in the proportion of nearly 11 to 14. Oil can be stowed on a ship in places not available for coal, and only takes up four-fifths of the space required for a similar weight of coal. Ships using oil will thus have greater speed, and at the same time need not be so large as if they burnt

coal. The one bad point is that oil is far more expensive than coal.

Oil, too, can be taken on board far more easily and rapidly than coal, and is better adapted for replenishing fuel at sea. It also requires no stoking, saves much work in removing coal-ash, and never necessitates any boilers being out of use for cleaning while the ships are running. The number of men employed in the stokehold will be far less in oil-driven ships, a valuable economy in men.

The supply of oil is receiving great attention at the Admiralty. Immense storage tanks are being erected at naval ports. Long contracts are being made ahead. These will be filled in peace and replenished in war from neutral countries. The policy of the Admiralty, as stated to the House by the First Lord on 17th July 1913, is to draw on various sources, and by the sea routes most easily defended in war, so as to build up in England an oil reserve sufficient to make us safe in war. For carrying oil

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from these reservoirs to the fleets and squadrons the Admiralty are building thirteen tank steamers, and there are a number available from those used in trade. It should be noted that oil does not deteriorate in store, and that its transfer between tanks and ships is rapidly effected.

As in the case of coalships, the safety in war of the ships carrying oil to the reservoirs, or out from them to the squadrons, depends on the general security given to the trade routes by the Navy.

The sources of oil are mainly the United States, the Caucasus, Galicia, the Dutch Indies, Persia, and Mexico. The British supply comes from Burma; Canada has some oil-fields, and there is in sight a source of oil in New Guinea, and in the shale-beds of Scotland and Australia. It is proposed also to obtain oil by distilling coal in Great Britain.

The replacement of the ammunition expended is a vital necessity in war. This includes torpedoes as well as cartridges and projectiles, and in this connection may be considered the necessity of providing new guns, or of retubing worn ones, as a large gun deteriorates greatly in accuracy after firing one hundred and twenty rounds.

The source of supply is the Home Country, whence the stocks at naval bases abroad is replenished. Their replenishment depends on the free passage of ships to those bases, and the same conditions apply to cargoes of ammunition as to those of coal. Both can reach British coaling stations and bases safely, if British trade is protected. Other navies operating in distant seas will have difficulty in replenishing ammunition, owing to want of bases where a stock can be found, and to risk in sending out supplies. Russia alone can replenish her distant base, Vladivostok, by rail.

The same remark applies to sending other naval requirements from the Home Country. Constant supplies of lubricating oil are needed, and would probably be sent out with the cargoes of fuel. Surgical and

nautical instruments, charts, and special machinery will sometimes be required. Medical supplies, clothing, cables, wire rope, boats, and ordinary ships' stores could probably be replaced at ports abroad.

Food supplies will generally be procured locally, and preserved provisions have simplified the victualling problem. The Admiralty have arranged for sending fresh meat to our squadrons in ships provided with cold storage, of which the greater number are British. Water can be distilled on warships, which obviates calling for it as in old days, but it is taken from the water-boats in every port wherever possible.

CHAPTER X

NAVAL BASES, COALING STATIONS, AND DRY-DOCKS

Bases equipped with everything required for the service of the Navy are indispensable, and are provided by every Naval Power in its home country. The ideal base is a well-fortified, roomy port, giving complete shelter against the enemy and the elements, provided with docks and dockyards, and furnishing ample depôts of coal, ammunition, and all naval and victualling stores required by fleets. It should contain the national shipbuilding yards, and be a station of reserve ships. The town should furnish the artisans and labour needed at the dockyards, and be connected by rail with the interior resources of the country.

There would be naval headquarters, with barracks for reserve naval personnel and the military garrison.

Such strongly fortified naval bases are:—
Great Britain: Portsmouth, Plymouth,
Chatham, Rosyth under construction, at
home, and Gibraltar and Malta abroad.

France: Toulon, Brest, Cherbourg.

Germany: Kiel, Wilhelmshaven.

Russia: Cronstadt, Sebastopol.

Italy: Spezzia, Naples, Taranto.

Hungary: Fiume.

United States: several on the Atlantic and two on the Pacific.

Beyond home waters no Power but England has a first-class base.

Secondary naval bases are formed at certain ports at home, and are necessary in outlying possessions for a Power aspiring to naval action in distant seas. They are less fully equipped as the primary bases, and have no building yards, but are fortified against naval attack.

There are such naval bases in the United

Kingdom at Portland, Milford Haven, Cork, and Cromarty. The fine naval harbour at Dover is not yet equipped as a base. Of the British ports abroad there are, besides the primary bases Gibraltar and Malta, secondary bases, with docks, dockyards, ordnance, and victualling depôts, at Bombay, Hongkong, Simonstown in South Africa, Sydney, Halifax, Esquimalt, B.C., Bermuda. Auckland, N.Z., will probably be so equipped.

France has Bizerta in Tunis, Saigon in Cochin China, Dakar in West Africa, Noumea in New Caledonia. Russia has Vladivostok; Japan, Port Arthur; Germany, Kiao-chau. The United States are forming naval fortified bases in Panama, Cuba, Hawaii, and in the Philippines.

Coaling stations are practically small naval bases away from the home country, often only slightly equipped and defended. By far the greater number lie in the British Empire. Those of Aden, Colombo, Singapore, and Mauritius, St Lucia, Jamaica, and Sierra Leone are the chief ones, of which Aden is

strong, and Singapore well provided with docks, yards, and marine resources.

France has, besides Algerian ports, Martinique, Jibuti on the Red Sea, Diego Suarez in Madagascar.

Commercial ports naturally keep permanent stores of coal for the use of merchant shipping, and could in war-time be used as coaling stations for warships. The larger ports, with considerable coal stocks and resources, are well provided with docks and workshops, and would form subsidiary bases for naval operations, especially as such ports would be defended by coast batteries. Of these purely commercial ports, apart from the naval bases and coaling stations mentioned above, the British Empire possesses a great number, not only at home but also abroad all over the world, in the Clyde, the Tyne, and the Mersey, the St Lawrence and the Hooghly, Kurachi and Rangoon, Melbourne, Fremantle, and Newcastle, N.S.W., Wellington, N.Z., Cape Town and Durban, besides a number of lesser ports only slightly defended.

The few commercial ports abroad belonging to other nations, besides those already named as naval bases, are undefended and unimportant.

The line between defended commercial ports and coaling stations, or between the latter and secondary naval bases, cannot be precisely drawn. The difference lies in the degree to which the place satisfies naval needs, and in the strength of its garrison and defence works. All naval bases are obviously coaling stations, but the latter are only to a limited extent naval bases, their primary object being to provide safety to the coal kept in stock to serve ships operating in adjacent waters. Warships will be constantly calling at such ports for coal, and, as they will require frequent replenishment of their magazines during war, it will be convenient if a stock of ammunition is kept there also, and docks provided for cleaning the ships' bottoms. It is desirable, too, that the ships should be able to obtain victualling supplies and naval stores at the same time,

and to find hospitals so that they can land their sick and wounded.

A naval station should also be on the chain of telegraphic communication, so that the ships there can receive orders for their next movements, and the depôts get due notice of the demands about to be made on them. It should be a seaport of some resources, with a population to supply labour, and be backed by an area of country to furnish supplies.

These requirements are well met by the British naval bases and coaling stations abroad, which are well distributed in every ocean, and more numerous than those of all other nations together. They are supplemented by the great number of commercial ports throughout the British Empire.

Other Naval Powers are ill provided with naval stations abroad. They have at home their great naval bases, and some important commercial ports like Bordeaux, Marseilles, Genoa, Trieste, Odessa, Bremen, Hamburg. But in distant waters they have only a very few defended minor bases and coaling stations. This seriously affects the power of their squadrons to operate far from home.

Besides having naval utility, British defended harbours play a useful part for merchant shipping. At the outset of war it may be difficult to establish complete protection at once, and, until we have made it impossible for hostile cruisers to keep the sea, our merchant ships may sometimes find themselves in danger of capture, and may welcome the safety provided by a defended harbour when closely chased. The trade of our enemies will have few or no such refuges.

The dry-docks which are provided at most naval bases and in all large commercial ports are of great value in war—not so much, as is generally imagined, in order to repair vessels damaged in fighting, as to provide means for keeping squadrons efficient at sea by cleaning the ships' bottoms, and giving an opportunity for overhauling underwater fittings—screws, rudders, and various orifices.

Ships' bottoms foul badly in a few months, especially in tropical waters, which seriously reduces speed and increases coal consumption. No warship not recently docked can do herself justice in war.

The British naval bases and commercial ports provide a great number of dry-docks. There are more than a score at home capable of taking the largest battleships, and nearly as many are distributed over the rest of the Empire. There are also a number of smaller dry-docks, both national and private-owned, conveniently placed in defended ports on every ocean. Foreign Naval Powers possess few docks at all beyond their home waters, and not so many as England at home. Thus Brassey's Naval Annual stated that in 1912 there were more dry-docks at Portsmouth than in all the navy yards of the U.S.

The number of docks possessed by England will be a great asset in war, while the want of docking facilities in distant waters must tell considerably against the efficiency of foreign squadrons.

These docks will also be available to repair ships damaged in action. Most coaling stations have dockyards, or at least workshops for minor repair. The use of these dockyards abroad will save damaged vessels making a long journey to the main bases, but it must not be overlooked that in themselves they add nothing to naval strength. In the day of battle a fleet with a dockyard close at hand has thereby no actual advantage over a fleet far from its base.

Docks are not so much wanted for repairs after action. In the British Navy great attention is paid to effecting all possible repairs by the artificers and machinery on board each ship. Special repair-ships will also be attached to fleets to do work impossible with the means available in the injured ship, which will in many cases obviate the necessity of sending the ship away to dock. The English and American navies have already provided such craft, and Rojestvenski had one on his voyage to Japan. A vessel damaged beyond such repair is out of action for some time, and

requires a dockyard, but not necessarily a dock, except for serious injury to the hull.

Floating docks are a valuable addition to docking facilities. The Admiralty have two in England, capable of taking the largest battleship, and have placed one at Bermuda of less size, and this policy is likely to be extended. There are commercial ones at Durban and Montreal. The Admiralty have provided five smaller floating docks for submarines and destroyers in Dover, Harwich, and other ports in England. The mobility and seaworthiness of floating docks is shown by the fact that one has been towed from the Tyne through the Straits of Magellan to Callao in Peru, and one from Baltimore to Manila through the Suez Canal.

In considering naval bases it is necessary to be on one's guard against an exaggeration of their importance. Their value is generally overestimated. They are doubtless of convenience to a squadron in adjacent waters, but they are, except perhaps for docking purposes, by no means essential to its action. No superior navy need depend on a fortified base in war, for it can make use of any convenient undefended harbour, or even roadstead, as an extemporised base, to which the stream of coal and supplies required can be directed. Such a stream of supply will be as well protected by the general action of the superior navy as the similar stream which must continuously flow to a defended coaling station.

"No moving navy has ever really laid a stress on fortified bases" (Colomb, Essays, 1889, p. 190). British Admirals seem to have been generally satisfied that command of the sea by their fleets was in itself protection for the base. Nor did they make much use of existing fortified bases, but preferred often to form extemporised ones nearer the scene of their activities. Thus Nelson, while blockading Toulon, used Gibraltar but little, and made his naval base in Sardinia.

A certain amount of land defence is necessary to protect a base against raiding

ships which may evade the superior navy, and it is most desirable that British squadrons should find a defended and organised base with a dockyard at a convenient distance from their scene of action. But such bases will seldom be found in the right place for any particular naval operations, and they cannot be shifted to suit. Their multiplication is no advantage to the navy, which naturally feels the necessity for defending their sea communications to be an additional responsibility.

As Admiral Sir Cyprian Bridge wrote: "The Navy desires not to have as many naval bases as possible, but to have as few as it is possible to get along with." Each is to some extent an incubus on the Navy, and may not be of any great utility. It was such considerations that made the Admiralty insist on giving up Port Hamilton, a fine harbour south of Korea, which England had recently acquired, and stop the War Office fortifying Wei-hai-wei after it had been ceded by China.

It is a common fallacy to suppose that "the fortification of naval bases releases naval forces which must otherwise be detained from the local defence of those ports." This is often said, and the same argument is used to bolster up the demand for extravagant local land forces for home defence, as we have seen lately in England. The fact is that the naval forces, by their action at a distance against the enemy's navy, prevent it attacking those ports or covering an invasion. The Fleet can best defend a base or a coast at a distance, and not by staying near it.

Fortified ports, or even defended harbours, are erroneously regarded as increasing naval power. We hear such absurdities as that "Aden commands the Red Sea," or Malta the Mediterranean, or Honolulu the Pacific; that the Germans in New Guinea, and the French at Noumea, "command Australian waters." Some have even said, "The possession of naval bases must decide the question of naval supremacy," and "The way to secure the latter is to fortify and arm bases."

Nothing could be more untrue or misleading. In reality, fortification of ports, however unavoidable for a weak Naval Power, is an *inefficient substitute* for their protection by naval action against the squadron threatening them. It is also an extravagant substitute, as a naval force acting at a distance can defend more than one threatened port.

The real objects to be defended are the communications between the ports of the Empire and between ships and their bases. If communication between a squadron and its base is cut, the effect is equally bad, whether the base is fortified and safe, or captured. Again, if communication is lost, it is impossible to replenish the base with coal, ammunition, or supplies, which, however well guarded, must soon be depleted, and an empty base is of no more use than if it were captured. The truth is, that the command of the sea depends solely on the superiority of the naval forces there, which, so far from being supported or strengthened by any naval base, themselves defend that

base by guarding the waters of approach, and support it by protecting the ocean communications and thereby the stream of supplies directed to it.

As Mr Thursfield, the well-known writer on naval matters, says, in his little book Naval Warfare (p. 138): "How absurd it is even to speak of a naval base as commanding the adjacent seas!" He has well summed up the truth in his Life of Nelson (p. 367): "The true measure of the naval strength required to establish an effective command of the sea is determined not so much by the area to be defended as by the naval strength to be encountered."

The power of taking a hostile oversea base follows on attaining command of the sea. It is merely a matter of time when it must fall, when its communications are cut; nor, even if uncaptured, can its strength help the enemy in the least to recover his lost command of the sea.

The following quotation from Mahan's Interest of America in Sea Power (p. 53)

is much to this point: "There is one caution to be given, beyond the need of which the world has not yet passed. Military positions, fortified posts, by land or by sea, do not confer control of themselves alone. People often say that such an island or harbour will give control of such a body of water. It is an utterly deplorable, ruinous mistake. Napoleon once talked in this way. 'The islands of Corfu and Malta,' he wrote, 'will make us masters of the Mediterranean.' Vain boast! Within one year Corfu, and two years Malta, were rent away from the State that could not support them by its ships."

Nelson, with his sure grasp of Naval Strategy, took a sounder view. "Minorca," he said, "was always England's when she wanted it. It belonged to the nation that controlled the sea." On this Mahan observes: "This applies to all small fortified ports all over the world, defenceless if their owners had no free communication with them, and still more to undefended ports."

CHAPTER XI

TELEGRAPHIC COMMUNICA-TION

Telegraphic communication, either by cable or "wireless," is of great strategic value in carrying on naval war, especially when ships and squadrons are operating over wide areas of ocean. Naval Strategy has been defined as the art of distributing and directing naval forces. Success in war will come to the navy whose distribution answers to the situation of the moment, whose movements are certain and co-ordinated, and whose combinations are thus exact and superior to those of the foe. This can only be effected if the central authority and also the subcentres—the commanders of naval stations, fleets, and squadrons-obtain and pass on ample, immediate, and continuous information as to the movements of the enemy and

the positions of their own ships. Telegraphic communication alone can provide this information, on which the strategic plans are based. It is equally useful for transmitting rapidly and certainly the necessary orders to all subordinate commanders for executing those plans effectively.

It is impossible, therefore, to overestimate the advantage which a combatant has for successful strategy, if he possesses a system of telegraphic communication linking up all parts of his naval forces with the central authority and with each other.

It will now be shown that England possesses such a system, which is an important factor of naval superiority over her opponents in war. The greater number of the larger cables over the world have been made and laid by British enterprise, and are mainly owned by British companies, and, owing to their landing-places being mainly on British soil, a very large proportion of the whole system of the world can be, in war, controlled by England. There will before

long be in addition a chain of "wireless" stations, reaching from England to Canada, India, Australia, and New Zealand, and eventually to South Africa, Hongkong, and the West Indies, by which the chief portions of the Empire, and all ships at sea within wireless reach of them, will be brought into connection.

The British cable system is too complicated to detail, but it may be briefly described as consisting of two lines encircling the world, an inner system and an outer one. Both have many branches, some to British possessions, many to foreign territory, where they connect with land lines, thus giving in time of war communication with allied or neutral Powers, or with our ships in their ports.

The Inner System connects the British territories in Europe, Asia, and Australasia. There are several cables from England to Gibraltar, and thence by Malta to Alexandria, whence a branch to Cyprus. Branches run to the chief Mediterranean countries and into the Black Sea.

Alexandria is connected by Egyptian land lines with Suez, whence a branch to Port Sudan. From Suez a cable runs in duplicate to Aden and Bombay, whence there is a cable up the Persian Gulf. From Aden a line runs down the east coast of Africa by Mombasa (for East Africa) to Zanzibar (British), and thence to Durban in Natal. At these two places it meets the outer system.

Bombay is connected by the Indian land lines with all parts of India and Ceylon. From Madras a cable goes to Penang and Singapore, whence to Hongkong, either by Labuan, a British possession off North Borneo, or by Cochin China (French). From Hongkong there is a line to Wei-hai-wei (British) and Peking, another to Port Arthur, another to Japan and Vladivostok, where it connects with the Siberian lines.

From Singapore (branch to Batavia), a cable runs to Banjowango in east Java, whence three cables run to north-western Australia, where they join land lines.

The Outer System consists of cables from

England to the Azores, and also to St Vincent in the Cape Verd Islands by Madeira, all Atlantic possessions of our old ally Portugal. From the Azores a branch runs to Nova Scotia. From St Vincent there is a line to Brazil and Montevideo, another to the British West African colonies and down the coast to Cape Town. The main line runs to Ascension (British) (branch to Buenos Ayres), whence by St Helena (British) to Cape Town, where land lines connect with Durban.

From Durban a cable goes to Mauritius (British), whence a branch to the Seychelles (British), and Zanzibar (British). From Mauritius a line crosses the Indian Ocean to the Cocos (British) (branch to Batavia), thence by Fremantle to Adelaide, where it joins the Australian land lines, and is thus connected with the cables to Tasmania and New Zealand. From near Brisbane a Government cable runs to Norfolk Island (branch to New Zealand), across the Pacific by Fiji (British), and Fanning Island (British),

to Vancouver, where it joins the Canadian land lines. All the thirteen trans-Atlantic cables from England are landed in Nova Scotia or Newfoundland, and "the Governments of Great Britain and Canada enjoy as complete control of them in war time as if the cables were State-owned" (Times, 11th April 1914).

From Nova Scotia a cable is laid to the Azores to connect with the outer system. Another reaches Jamaica by Bermuda, and thence joins up the British West India Islands and British Guiana. From Jamaica cables run to Panama and down the east and west coasts of South America.

It will be seen that these systems link up (several by a duplicate route) every portion of the British Empire except the Falkland Islands, putting aside the small and unimportant islands of the Indian Ocean and Pacific.

England is, of course, connected by a number of cables with all western Europe from Portugal to Norway, which brings her into communication with allies and neutrals in war, and with any of her outlying squadrons in touch with their ports. A cable, which might be of strategic importance for naval purposes, joins Scotland with the Orkneys, Shetlands, and Faroes, and Iceland. Another runs from England up the Baltic to Russia.

The British cable system will shortly be supplemented, but by no means superseded, by a chain of "wireless" stations. This will comprise a western chain of stations in Ireland, Newfoundland, Winnipeg, Vancouver, and an eastern chain of stations in England, Egypt, Aden, Bangalore, Singapore. The station in Egypt will connect with one in British East Africa, and that with one in South Africa. Singapore will connect with Australia, and thence with New Zealand. Bangalore will eventually connect with Colombo; Singapore with Hongkong; and New Zealand with Fiji. These chains will thus link up all the main portions of the Empire.

Wireless telegraphy is not yet a substitute for cables. It is far from certain, being liable to climatic and electric interruptions, and to interference from other stations. Cables give unvaried, accurate, and certain service by day and night. Wireless is also open to being received by outsiders, and is not secret. "Wireless" stations, on the other hand, are far cheaper than cables, and can be placed inland out of danger in war, whereas cable landings are vulnerable. Wireless telegraphy is independent of, and can pass over, intervening hostile territory.

Cables are liable to be cut by an enemy, although this is difficult to do except in shallow waters. Their position in deep sea is not easy to locate, and to cut them when found demands skill and special preparation. Cables being generally laid on the shortest line; follow the great trade routes, and the protection given to these by England's command of the sea provides safety to the cables, making the movements of cable-cutting vessels risky, while facilitating the cutting of

the cables of the enemy, or even of neutrals should strategy demand, as was done by the United States in the Spanish War in 1898.

The cable communications of other nations are limited. There are foreign cables to North and South America and down the west coast of Africa. A German and Dutch network in the islands south-east of Asia connects Yap in the German Carolines with Java, Shanghai, and Guam on the American Pacific cable. The United States have a cable from California to Hawaii, and thence by Guam (with a branch to Yokohama) to the Philippines. The Russian land lines join Europe with China and Japan and also with India through Persia, as do the land lines of the Turkish Empire. There are local foreign cable systems across the Black Sea and Mediterranean. The United States are linked with the West Indies, Panama, Hawaii, and the Philippines; France and Italy with their North African possessions; Japan with Korea, Manchuria, and Formosa.

The lack of oversea possessions denies to foreign nations a world chain of "wireless," but the United States will reach Panama, Hawaii, and the West Indies; France Algeria and her West African possessions; Italy has wireless to Tripoli; Germany will have a chain from Yap to Raboul (New Guinea Protectorate) and her colony of Samoa.

The lead taken by England in telegraphic communication all over the world can hardly be lost. She possesses almost a monopoly of cable construction, for which are needed expensive works, demanding a good expectation of output to be remunerative. Even the American Pacific cable was made in England, whose manufacturers can turn out 100 knots of cable a day. She has also 9 of the existing 14 cable-laying and repairing vessels (including the only two over 5000 tons), to 2 French, 2 German, and 1 Japanese. This will give her the power during war of readily laying any new cables needed to link up temporary naval bases, or theatres of land

operations, with the existing system. Cable ships will doubtless accompany joint expeditions for this purpose, and be stationed at naval bases to effect repairs. Cables can be laid at seven or eight knots an hour.

The British telegraphic network will warn every part of the Empire when attack threatens, transmit calls for help, and direct reinforcements. It will ensure that the British squadrons acting from naval bases are in constant touch with the Admiralty at London, and with each other. In addition, powerful "wireless" stations ensure that each British warship on the seas between them is in communication with her Commander-in-Chief, and can thus receive immediate information and orders for her movements. British merchant ships, too, will be readily informed of the outbreak of war and of the position of threatening hostile cruisers or protecting British ones.

Thus there will be ensured rapid concentration of British naval strength when and where needed, and the concerted operations

of British squadrons and expeditionary forces will be effected with accuracy against an ill-informed and uncertain enemy. Naval administration will also be facilitated by the transmission of the demands of naval bases for coal, ammunition, and stores, and notice of approaching calls on them will be given, which will expedite supplies and docking when warships arrive.

This system of cable and wireless communication, which England will control in war and deny to her foes, forms, as a German writer says, "a magnificent strategic system" of inestimable value for Imperial Defence. If trade is the life-blood of the organism of Greater Britain, the telegraphic network is the nervous system on which the chief cities and naval stations are the ganglia.

CHAPTER XII

ADVANTAGE IN STRATEGIC POSITION

Finally, it should be pointed out that the geographic position of Great Britain gives her considerable strategic advantages in naval war. Great Britain is far better situated than the countries which front on two seas and are obliged to keep up a distinct fleet on each, and her Navy is in a position of great advantage when confronting alliances such as that of Germany and Austria, whose navies are based on two widely separated seas. England's fleet in Home Waters can be concentrated readily and centrally disposed so as to fling superior force against either of the divided fleets of the enemy. Her situation is what is known in strategy as one of interior lines, whose

advantage to a mobile and skilfully directed force has been shown in many wars.

Many other countries are less happily situated. Except Japan, Austria, and Italy, all Naval Powers are handicapped by having two frontages on separated seas—France on the Atlantic and Mediterranean, Germany on the Baltic and North Sea; far worse off are Russia with her Baltic, Black Sea, and Pacific seaboards, and the United States facing the Atlantic and Pacific.

The geographical distribution of the chief British bases abroad is also very favourable. Fleets based on Gibraltar and Malta, with the use of Alexandria and Port Said, command the Mediterranean, protect the great stream of British trade through it, and deny to our enemies an exit into the Atlantic so as to effect a junction with allied fleets in the Channel or North Sea. As our fleets in Home Waters command the west coast of Europe between Spain and Norway, and those in the Mediterranean the south coast, the action of our Navy has been heavily

felt in past wars along all the coasts of Europe from the Baltic round to the Black Sea.

As regards more distant theatres of war in other continents, the strategic position of England's naval stations abroad, on which her outlying squadrons are based, is equally advantageous, as already shown in discussing docks and coal supply.

Simonstown in South Africa supports the squadron protecting the great stream of trade rounding the Cape, whose sea-range and scope of action are enlarged by the defended coaling stations at Durban and Mauritius to the east, and the depot at Ascension to the west, to which St Helena might be added if required.

A squadron based on the well-equipped and defended port of Singapore, with its scope of action extended on either hand by the coaling stations at Rangoon and Calcutta, and at Thursday Island, guards the channels by which trade passes to and from Eastern Asia, and can cut off from Europe our enemies'

trade and territory in those waters, and protect our ally Japan from western aggression.

A squadron based on Bombay, with coaling stations at Aden, Kurachi, and Colombo, makes the Red Sea and the Persian Gulf virtually British lakes, and guards the trade routes between India and Europe. The China Squadron, based on Hongkong and Auckland, and the Australian Navy at Sydney, guard British trade, and the waters of approach to the British possessions in the Western Pacific.

Turning to the western world, we find in Halifax and Bermuda fortified naval bases well placed to support fleets operating in the North Atlantic, with defended stations in Sierra Leone and Ascension further south. The smaller fortified bases in St Lucia and Jamaica, and other coaling stations in the West Indies, are available to support naval operations in the Caribbean Sea and at the approaches to the Panama Canal.

The German General Bernhardi sums up the matter in his Germany and the Next

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War: "The place of Great Britain as a great Power is far more secured in her insular position, and her command of the seas, than ours, which is threatened on all sides by more powerful enemies" (English translation, p. 247).

PART IV THE ACTION OF THE ARMY

CHAPTER XIII

THE WAR ON LAND

"But thus much is certain, that he that commands the Sea is at great liberty, and may take as much and as little of the war as he will. Whereas those that be strongest on land are many times, nevertheless, in great straits."—BACON, Essay xxix., "Of the True Greatness of Kingdoms and Estates."

SEA Power, it has been shown, is the guarantee of security for the Empire as a whole, and therefore for each of the portions composing it. But for its development and prosperity another condition is essential, and that is *Peace*. Therefore, when the Empire becomes involved in war the ultimate object of the fighting is to obtain peace, but peace only on conditions which will satisfy the

interests of the Empire, and frustrate hostile intentions. Such a peace the enemy will never consent to, until convinced that to give up hope of getting what he desires, and to cease to fight for it, is a less evil than to continue suffering the injuries which the war is inflicting on his people.

Therefore, to bring the war to an end, injury and suffering must be inflicted on the enemy to such a degree as to induce him to come to terms. Such pressure can seldom be exercised by naval action alone. The damage which the Navy can inflict on the enemy is limited to the destruction of his ships, the stoppage of his sea-borne trade, some injury to his coasts and seaports, and perhaps the capture of his smaller islands and colonial ports.

Such injury may hurt the enemy gravely. It will dislocate his trade, and reduce his wealth and resources for war. It may humiliate him, weaken his Government, and encourage a peace party in politics. But all the Navy can do will generally not pro-

duce enough vital pressure to bring the enemy to terms. It will be necessary to drive the stress of the war home to him, to take his colonies and naval bases, and raid or even invade his home territory. Such operations are beyond the power of the Navy alone, whose action is limited by the enemy's coast-line, and they can only be undertaken by land forces.

It will be seen, therefore, that in the course of a great war successfully waged by England there will be two distinct periods. During the first the Navy plays the leading part by attacking the enemy, while the function of the Army is the subordinate one of defence. During the second period the rôles are reversed, and the Army plays the leading part.

In the first period, when the Command of the Sea has not yet been attained, the Navy has to render the enemy powerless at sea, and to keep open the sea communications of the Empire, thus making both trade and territory secure. The Army, while the warships of the enemy are yet at large, will be guarding the fortified naval bases of the Empire, and defending seaports and coasts against raids. This earlier period in past wars has been marked by the scores of glorious victories which endowed the British Navy with its historic supremacy, and gave Command of the Sea to England, whose farscattered dead sleep under the waters they conquered for her.

The second period of the war opens after the Command of the Sea has been attained, when naval predominance has made it impossible for the enemy to direct oversea expeditions against the Empire, and has, on the other hand, made it feasible to move British troops across the sea to attack the enemy's territory. This period of past wars has therefore been mainly one of land operations by the British Army, during which its brilliant record on every continent has been built up.

The military enterprises thus made possible must begin by the despatch of troops in

transports, escorted by ships of war. The movement is organised, carried out, and made safe by the Navy, which also helps in landing the troops, and is charged with guarding their sea communications during the operations on shore. Being thus carried out by Army and Navy in conjunction, the whole is called a "joint expedition," and its execution is rendered possible by what has been aptly termed "the amphibious power" conferred on England by her Command of the Sea.

This amphibious power affords opportunity for surprise strokes and for changing the theatre of operations at will, so that joint expeditions may influence land campaigns to a greater degree than their strength would lead one to expect. Even if their preparation become known to the enemy, their destination can be kept secret. The fact that they will move across the sea, from which the enemy is debarred, affords a choice of widely separated objectives for their attack. The enemy will thus be in

doubt as to when and where he will be assailed, and will hesitate to concentrate his strength for defence at one particular spot. The despatch of an expedition is easier for England to undertake than it is for other nations, owing to her unrivalled experience in such operations, and the far greater number of vessels available as transports.¹

When landed, an army backed by a fleet has also a great advantage for its strategy in its power of changing its lines of communications at will, as the fleet can establish a new base at a different part of the coast. This was continually done by the British commanders in the American Revolution. Command of the Sea thus increases the scope of action and freedom of manœuvre of the army, and makes it difficult for the enemy to attack its communications. If driven back, it can retire to a safe base, like Wellington to Torres Vedras; or re-embark, like Moore at Corunna; or move to a new theatre of action by sea, as Abercromby did

¹ See Appendices B and F.

from Spain to Egypt in 1801. As Sir Frederick Maurice says in his Balance of Military Power in Europe (p. 14): "There is a quite peculiar and enormously potent military influence exerted by a small army which may be landed at pleasure at unknown points by a nation possessing Command of the Sea. There is no nation in Europe whose power can be so readily exercised."

In the varied war-history of England her innumerable oversea expeditions have taken many shapes. On the largest scale they have developed into great land campaigns; on a smaller scale they have attacked the enemy's fortified naval bases and the fleets sheltered in them, taken his lesser ports abroad, and captured his colonies. All this may well be repeated in any future hostilities, and, so far as the nature and object of the war permit, similar operations will form the chief contribution of the Army. Such expeditions, except for minor local objectives, are obviously beyond the power of localised

troops, and will have to be made in future, as in the past, by the military striking force of the Empire—the British "Expeditionary Force," whose strength and organisation is based on the work it has to do across the sea. And it is in co-operating with the Expeditionary Force that the forces of the Dominions have their opportunity to take an effective share in the main theatre of the war.

CHAPTER XIV

THE BRITISH ARMY IN HISTORY

"Quæ caret ora cruore nostro!"
("On what shores has our blood not been shed!")
HORACE, Odes, ii. 1.

At the close of the last chapter it was stated that British oversea military action has been of every variety from a great campaign down to the capture of a port. Many campaigns have been fought by British armies in the Netherlands; others, under Marlborough, in Bavaria, and under Peterborough and Wellesley in the Peninsula. Chatham sent one army under Wolfe to wrest Canada from France, and another into Germany to help Frederick the Great, which added the brilliant victories of Quebec, Minden, and Warburg to the military record of Britain. During the struggle with Napoleon, British armies turned his armies out of Egypt (1801), out

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of the "toe" of Italy (1806), out of Spain (1813), out of Belgium (1815), and three times out of Portugal (1808, 1809, 1811). It is noteworthy that the capitals of Denmark, Portugal, Spain, the United States, and France were all entered by victorious British armies during the few years intervening between 1807 and 1815, when Napoleon's forces had occupied all the capitals of Continental Europe. In India the Army had during two centuries been incessantly engaged in innumerable campaigns, nearly always with success, winning decisive victories against incredible odds. As a Mahomedan historian of India wrote: "It must be acknowledged that this nation's presence of mind, firmness of character, and undaunted bravery are past all question."

These facts should dispose of the idea that the British Army has hitherto only been engaged in raids or savage warfare. Blenheim (1704), Dettingen (1743), Minden (1759), Vittoria (1813), and Waterloo are decisive victories in which

British generals and British soldiers played leading parts, and they form striking landmarks in five Continental wars waged by England during one century. It must not be forgotten that none of these wars would have been fought without the naval strength which made feasible the sea passage of the armies to the theatres of operations, and guarded their communications during the war. As regards fighting on a smaller scale, British oversea expeditions carried out by Navy and Army together are innumerable in history, and have often had important results. Some have been directed to the capture of an enemy's naval base and the fleet which had taken refuge in it. This occurred when we took Louisburg from France (1745 and 1758), and Manila and Havana from Spain (1762). By similar expeditions to Holland (1799), to Copenhagen (1807), and to Lisbon (1808), England snatched Dutch, Danish, and Russian fleets from Napoleon's clutches. The fortress of Sebastopol in 1854, like Port Arthur fifty years later,

was the object of a great siege, which resulted in the capture of a great naval base and the destruction of a Russian fleet.

British expeditions have also frequently taken the enemy's ports abroad, which has resulted in the capture of the whole colony thus attacked. This method of expanding the Empire began when Cromwell's army and navy took Jamaica in 1655, and was continued by the capture in 1660 of the Dutch colony which is now New York. In 1704 England took from Spain Gibraltar, in 1708 Minorca, and in 1762 Cuba and the Philippines. The French islands in the West Indies were taken during the Seven Years War, and again during the Revolutionary and Napoleonic wars, when also Malta, the Cape, Ceylon, Mauritius, Java, and the Ionian Islands were added to the Empire. During those wars Corsica, Elba, and Sicily were long garrisoned by British troops. Hongkong, Cyprus, the Sudan, and Wei-hai-wei have been annexed by military occupation in more recent years. Like India and Canada, all these

war-prizes of the Empire, whether retained or given up, were gifts of Sea Power wisely made use of by military enterprise and political foresight.

The fact is clear that in war all colonies, unless large and self-supporting, are at the mercy of an enemy possessing naval superiority. When their communications with the home country are cut, they cannot long hold out. It is not too much to say that, when a nation finds herself at war with an enemy stronger at sea, any oversea possession she may have will prove to be merely a hostage presented gratuitously to her foe. This fact is seldom realised when foreign nations strive to acquire colonies. But the colonies of Spain so fell to the Americans, who themselves are now aware of their precarious tenure of the Philippines, while in the seventeenth century the Dutch by Sea Power seized the islands of the Portuguese in the East. England being at war, her enemy's insular colonies must drop into her hands like ripe fruit from a tree.

The prospect, therefore, which faces any

country attacking us is, that unless she destroys our sea supremacy, she is more than likely to lose her navy, her sea-borne trade, and her colonies, as our Ambassador told Louis Napoleon when he was threatening us with war in 1860. These words were amply justified by the history of past wars between the two nations, and averted the conflict.

Fine examples of well-executed joint expeditions are those which England directed against Egypt in 1801 and 1882. The co-operation of the Navy and Army was in each case admirable. In 1801, a unique feat of war was performed: 7000 men effected a landing, with a loss of 625 killed, although vigorously opposed by 2500 of Napoleon's veterans in a prepared position. This was only possible owing to the admirable dispositions of the Navy and the discipline and courage of the Army. In 1882 the Navy, by a rapid and well-planned movement, seized the Suez Canal, and escorted the Army through it to an unexpected landing-place, thereby

surprising the enemy. In both cases the conquest of Egypt was effected in a few weeks.

In short, the result of Command of the Sea held by Great Britain is that her Army has been invariably engaged in fighting overseas and never at home. As the "Trojan women" sang of the Greeks:

"Their slain lay staring into strange skies, and are buried in alien earth."

It is in innumerable wars in every quarter of the globe that the British Army has built up its glorious history, and gained its worldwide experience. No other army possesses such a record. Its troops have campaigned not only like Roman legions in lands bordering the Mediterranean, or, like Napoleon's veterans, in most countries of Europe, but also in every other continent of the world. British soldiers have waged war in North and South America, and all round Africa from Sierra Leone to Somaliland, in Egypt and Morocco. They have fought on the banks of the Tagus and the Ebro, the Garonne, the Main, the Weser and the Danube, the Niger and the Nile, the

Hudson and the Mississippi, the Rio Plata and the St Lawrence, and on the shores of the Baltic and the Sea of Azof, the Red Sea and the Persian Gulf, the Straits of Malacca and the Yellow Sea. In Asia, they have invaded China and Persia, besides warring incessantly all over India—from Ceylon to Tibet, and from Afghanistan to Burmah.

British forces have served in all the islands of the Mediterranean and the Carribean, and in such distant ones as the Azores and St Helena, Socotra and Java, Fiji and the Philippines. They have taken fortresses as far from each other as Quebec, Gibraltar, Sebastopol, and Delhi; two of them, Havana and Manila—half the world asunder—at the same time, a noteworthy feat. The past fifty years have seen British soldiers landing on foreign soil in Mexico, Japan, Egypt, Crete, Albania, and occupying capitals of alien potentates—Magdala and Mandalay; Kabul, Kumasi, Cairo, and Khartum; Pekin and Pretoria.

As to the warlike qualities displayed by

the Army we sometimes find generous appreciation from Continental military writers. The French General Zurlinden noted the "qualités de tout premier ordre" which characterise the British Army, and wrote: " Partout et toujours l'armée anglaise a fait preuve d'une force, d'une solidité, d'une energie, et d'une hauteur de caractère tout-àfait remarquables." In the Militär Wochenblatt, the organ of the German Army, we find on 7th May 1910: "Facta loquuntur. Everywhere that British troops have fought, in India, Egypt, or against the Boers, they have always done their duty, as everyone knows, and the corps of officers has shown itself up to the level of its duties."

The latter point has been enlarged on in a brilliant appreciation which has special value in being from one not biassed by English descent, and particularly competent to appreciate the fighting qualities because of his own genial combativeness. Theodore Roosevelt wrote, in his War in 1812, of British officers :-

"They were imperious, able, resolute men, with a high standard of honour. They upheld with jealous pride the reputation of an Army which in that century proved again and again that no soldiery of Continental Europe could stand up against it. They wore a uniform which for the last two hundred years has been better known than any other wherever the pioneers of civilisation tread the world's waste places or fight their way to the overlordship of barbarous Empires: a uniform known to the southern and northern hemispheres, the eastern and western continents, and all the islands of the sea. . . . The scarlet - clad officers who serve the monarchy of Great Britain have conquered many a barbarous people in all the ends of the earth, and hold for their sovereign the lands of Moslem, Hindoo, and Arab, of Malay, Negro, Polynesian. In many wars they have overcome every European rival against whom they have been pitted."

There need be little doubt but that the future will bear out the past, and see British

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troops fighting all over the world. And, as Britain across the ocean grows into her full strength and takes up the burden of the Empire, her sons insist on emulating on foreign shores the famous exploits of their comrades from the Mother Country.

PART V THE ACTION OF THE ENEMY

CHAPTER XV

ATTACKS ON THE EMPIRE

"Rarely have great expeditions sent from home met with success. They usually entail ruin to the army and to the nation undertaking them."—Thucydides, on the Athenian Expedition against Syracuse, B.C. 415.

So far we have been considering the aggressive action by sea and by land which tradition has hallowed, and policy dictates to the Empire when in danger of attack. We will now examine what this danger really amounts to, and investigate the conditions under which the enemy must act in operating against any part of the Empire. We shall find that these conditions limit the strength of the attack, so that the defence required to meet it need not be on so large a scale as is generally believed.

The British Empire is distributed over the seas of the world and is an Island Empire. Most of the possessions of the Crown are actually islands, and the rest are virtually so in a strategic sense. The neighbours of our continental possessions are either weak European colonies, or savage peoples who may be neglected as enemies. This remark applies to our Colonies in Africa, to Aden and Malaya in Asia, to Guiana and Honduras in America.

The only land frontiers of the Empire open to serious invasion by land are those of India, Canada, Egypt, and the British mainland facing Hongkong. Gibraltar is practically an island for defensive purposes. India is only liable to invasion across hundreds of miles of the wildest mountain regions, devoid of resources and communications. Canada has only one neighbour, not likely to be hostile. Egypt has only a short frontier open to attack by the Turks or their allies, who must make a desert march where Sea Power can bring a defending force to bear on flanks and front. Indirect defence

to attacks by all these Powers could be provided by naval action directed against their home coasts. Against invasion by other nations, India, Canada, Egypt, and Hongkong are strategically islands, as they can only be reached by sea.

With the above exceptions, we may consider that the British Empire can only be attacked by sea—that is, by a hostile navy, or by a joint naval and military expedition. Before operations against the land can be begun, the hostile ships have to cross the sea and put men ashore. This is work for sailors exclusively, so that the problem of attacking the British Empire is essentially a naval one. Naval opinion is therefore concerned in dealing with it, and to bring the attack to naught is the business of the British Navy. This fact is too often overlooked, and oversea attack is discussed as if it were a purely military matter.

Invasion implies the intention to conquer the enemy's territory, that is, to overrun and hold it, and therefore demands the employment of an army. Invasions differ from attacks on a smaller scale, like the *Diversions* and *Raids* discussed later, in that they aim at gaining permanent success by a continuous process, instead of temporary advantage by a sudden and hurried blow.

The practicability of effecting the invasion depends on providing not only the army needed, and sufficient transports to carry it across the sea, but also a fleet to protect their movement. As Mr David Hannay says in Sea Power, p. 164: "The proposition that when you have to conduct prolonged operations across the sea, it must first of all be necessary to defeat whatever force your opponent can send to meet you on the sea, would seem to be obvious." The fleet is further necessary to secure the safety of the sea-communications during the campaign on land. As Sir George Clarke says: "Oversea invasion more than ever in the past requires the maintenance of unbroken communications during the period necessary to ensure complete success" (Fortification, p. 196).

Thus the possibility of effecting an invasion by sea depends from first to last on the fleet, and, in consequence, this operation has seldom been attempted, and never with success, except by a nation much superior at sea, as when the Allies invaded the Crimea, or when France conquered Algeria. Invasion is, of course, feasible against a country without a navy, which made it possible for France to invade Mexico, Madagascar, and Morocco, or for the United States to conquer the Philippines. On the other hand, the superior navy of England has always kept off invasion, and constantly made it possible for her to invade hostile territory. The reason will be seen if we consider the difficulties to be faced by any Power attempting to invade some part of the British Empire.

To begin with, the despatch of the expedition will make great demands on the invader's navy. For security and assistance during the voyage a naval force must escort the transports, and a covering fleet must be sent ahead to clear away naval opposition

near the threatened coast. This has been the invariable practice in British expeditions, where it was recognised that a fleet was gravely hampered for battle if it had to provide for the safety of an unwieldy convoy of defenceless transports as well as to fight an enemy.

In the next place, the invading army must be large enough to beat local forces, and organised so as to take the field on landing. It must be a complete army of all arms—horse, foot, and artillery—with engineers, transport ambulances, hospitals, and provided with food supplies, ammunition, and other stores for a campaign of some months. It will thus comprise tens of thousands of men, thousands of horses, hundreds of guns and vehicles, and a mass of stores.

The third and greatest difficulty is to collect the large number of ships needed to carry this army. The tonnage required for an ocean voyage of a complete army may be roughly reckoned at 9 or 10 tons gross per man of the force, according to American

estimate, which agrees fairly well with the 2½ tons net per man, and 7 per horse, laid down by the far wider experience of England (see Appendix F). It will be necessary to provide shipping of some hundreds of thousand tons. The crowding on shipboard may be permissible for a short voyage, but cannot be thought of for a long one of weeks, perhaps through tropics, or the health of the men and horses will be impaired. The French soldiers sent to Madagascar in 1895 in crowded transports were decimated by disease. Most of the transports, it may be remarked, were British, for even the second greatest Naval Power had not enough of her own to carry that small force.

A fourth difficulty will be the provision of coal for a long voyage, noting that much will be needed for condensing water for so many men and horses. Colliers may accompany the expedition, but will add to the already great number of slow ships. If they are ordered to meet the expedition there is great risk of their being captured on the way.

Any neutral ports passed will provide little or no coal. Sir Charles Dilke sagely remarks: "No naval expeditions could be sent off, without utter recklessness, by an enemy not in possession of coaling stations near the place to be attacked, to form bases for naval operations."

Having thus seen the difficulties met in planning an invasion, let us consider the dangers attending its actual execution. They are very great—at the start, on the way, and at the destination. The army required can only be assembled in the home country, so that sea invasion aimed at any outlying portion of the Empire must start from its home ports, and will have to traverse thousands of miles of ocean to reach its destination.

The risks begin when the ships are leaving port. They cannot all get out at once on one tide, and as they emerge will be exposed to attack in detail, for British cruisers will certainly be sent to watch the coasts of any enemy threatening hostilities. The stir of preparing the expedition and the collection of transports will have given warning. News

is spread by neutral merchants, Embassies, and Consulates, and leaks through the Press. It is certain that though a small raid may start surreptitiously, nothing like an invasion can be a surprise.

Granting, however, that the expedition gets under way without attack, the period of the voyage will be full of danger and protracted. The speed of a convoy is not even that of its slowest ship, as a knot or two must be kept "in hand" to allow stragglers and ships retarded by action to come up. The convoy will form a mass of ships extending over many miles of sea, for they will not be able to steam in definite formation or close together. Masters of merchant ships are not trained to act on naval signals or by sextant observations; the engineers are not trained to keep station, constantly changing the rate of their engines, nor can the invader spare naval officers from his fleet to navigate each transport, so as to remedy these failings.

The convoy will thus, unlike a naval squadron, extend widely, and form a clumsy, dis-

orderly group of ships, difficult to direct and still more difficult to guard. It will necessarily be very liable to detection. By day its smoke will betray it, by night its lights, for such a mass of ships could not move with lights out without risk of collision. If detected, there will be much risk of the expedition being intercepted by British cruisers guarding the trade routes. Its sailing will have become known and its destination guessed; while from every merchant ship which sights it, and from every landfall it makes, news will reach the Admiralty, and the Admiral on the nearest naval station, by cable or wireless. A British squadron will soon be on its track, moving with greater speed than the fleet of transports, and likely to intercept it.

The course the expedition will follow may not be exactly known, but cannot vary outside moderate limits without increasing the length of the voyage and entailing increased difficulties as to coal, water, and health. The searching powers of fast cruisers equipped with wireless is great. Should one get into touch, and call up others, attack on the convoy will ensue. The escorting squadron will have few ships compared to the scores of transports, and cannot be everywhere at once to protect them, so that the attacker, even if inferior, will be able to damage the convoy before being driven off. Transports cannot escape cruisers by flight, as in days of sails, and are helpless to resist, while the guns of the weakest warship can sink them at a distance. Thus were both Chinese and Japanese transports, and their freight of soldiers, destroyed in the wars of 1895 and 1904. Each ship sunk will make a bad gap in the army of invasion. The escort, hampered by efforts to guard the transports, will not be able to fight the attacker nearly so effectively as if it were alone. As Mr Julian Corbett says: "A mass of transports and warships is the most cumbrous and vulnerable engine of war."

When an invasionary expedition has reached its destination, the landing of the army forms the most critical period of the whole operation. Absence of opposition is now essential for landing troops: the arms of to-day are too formidable to be faced in the open by men unable to return the fire. A landing under fire attempted by men crowded in boats would be like troops on land assaulting a defended position in small thick columns without firing and over ground quite devoid of cover, which would be a crazy attempt under modern fire.

Modern landings must therefore be made so far from populated districts and railways as to be unresisted. It is not always easy to find sheltered water for the purpose, and landings are risky on open beaches, where surf is likely, even in a calm, and bad weather may come on. Owing to want of training it is not possible to anchor merchant vessels as close as warships, which can *moor* and thus require less room to swing in than if at anchor. The transports will therefore occupy much landing front, and it will be a slow process to marshal them into their right places for the landing, and a still slower one to disembark men, horses, guns, and ammuni-

tion. Merchant ships carry few boats, and have little deck space to stow extra ones, so that many trips will be needed to clear each ship, and the distance to the shore may be considerable. The landing will therefore take a long time, perhaps some days, even if unopposed, and executed with every assistance from the fleet.

If the invader holds Command of the Sea, as England would in attacking a coast, he is free to move his transports at will from one landing-place to another, and it will be difficult for the defender of a long coast-line to oppose his landing. The point of attack cannot be foreseen, and becomes certain only when disembarkation begins. Even this may be a feint to draw land forces to this point, and the actual landing may then take place unopposed elsewhere. For a force afloat can be moved to a distant point far more quickly than a force on land, whose units move at intervals, in slow succession, even if a railway is available. The threat of effecting a landing thus keeps the defender in an unavoidable

state of indecision, and his troops will be moved hither and thither on fruitless errands, under constant counter-orders as the point of danger shifts. In military parlance, the invader has "the initiative," and can make the most of its advantages as long as he holds Command of the Sea, so that the difficulty of effecting a landing is not unsurmountable as against opposition on shore.

But the case is very different when there is any chance of being attacked by sea, as there must be in invading a British possession. While effecting its landing, the expedition is in the worst possible situation to receive naval attack. The transports will be helpless at anchor, and the warships will have many officers and men helping the troops to land, and cannot cover the disembarkation and at the same time fight a battle to advantage. The British squadron, even if too late to intercept the passage, may appear on the scene in time to interrupt the landing. If successful, it will capture the troops afloat, and cut off those ashore. Even if worsted,

it will sink or damage transport, and hamper the landing.

Supposing, however, the invading army were safely landed, it could, if strong enough, defeat the defending field forces and occupy the country, as long as there is no danger at sea. The most likely course for the invader to adopt will be to seize the chief coast cities and dominate the main areas of population with his army, while his navy blockades all ports and stops the entry of arms and ammunition. His army can be kept superior to that of the defender as long as he can be reinforced from home. The defender thus driven into sparsely inhabited districts, and cut off from populated areas, with the railways and resources they comprise, will have his recruiting grounds diminished, and will run short of ammunition and many necessaries for war. The Government and the railway system will be paralysed, and operations will be planned and executed with difficulty. Resistance must eventually fail, and the conquest of the country will be effected.

The only possible means by which this disastrous result can be prevented, after the landing has once been effected, would be the arrival of a superior fleet to defeat the invader's navy, and cut his sea-communications, which will loosen his hold on the country. Napoleon's dictum that "communications are the first consideration in war" is as true by sea as by land. An army with communications cut, unable to receive reinforcements, ammunition, and stores, or even orders and news from home, will be paralysed. Its operations will languish, its strength fail, and it must at last be driven to its sea base, where it will be invested and besieged. Without warships to help it, and unable to escape on its transports owing to hostile squadrons off the coast, it can only surrender, and the invasion will have ended in disaster. This was the fate of Bonaparte's invasion of Egypt, of the British at Yorktown, and of the Spanish invasion of Sicily in 1718. It is therefore not likely that any nation without permanent Command of the Sea would care

to undertake an invasion doomed to end in the destruction of its fleet and the surrender of its army.

The paramount question for the invader will be whether, while effecting his object on land, he can look forward to security from attack by sea. It is certain he cannot reckon on immunity unless the navy of England has been defeated elsewhere by other fleets, and is definitely reduced to inferiority. It is not conceivable that this result could be effected by any one Power alone, especially by one that had detached part of its fleet for a separate enterprise. The effort required would demand the whole naval strength of a coalition of Powers. In fact, the only correct course for a nation desirous of conquering any portion of the Empire would be, not to send an army and a fleet to invade it, but in combination with some powerful ally to win fleet actions to break down British naval superiority. Until this has been done, any invasion must end in disaster, whatever its strength and success on land. Only complete success at sea will make the invasion successful. Even then, it should be noted, the invader cannot hold his conquest except by the consent of his allies, and the overthrow of the British Empire would certainly result in a "Balkan" quarrel over the spoils.

We are thus led to the conclusion that immunity from invasion can only be ensured by the British Navy. Sea Power is, in fact, the guardian of the integrity of the Empire.

It may perhaps be thought that an enemy might direct against the British possessions expeditions of smaller size not amounting to an invasion, so as to reduce the risk run. But if small, they would be too weak to hope to overrun the country, while the larger they are the more they will encounter the same risks and difficulties as an invasion. Their scope will be limited by serious opposition on land and by the certainty of interference by sea. It is difficult to think that any object attained would compensate for the loss of the military force which must ultimately ensue.

Such an enterprise would only amount to what is termed a Diversion, which Clausewitz defines in his classic work On War (book vii. chap. xx.) as "an incursion into an enemy's territory, with the object of drawing off a portion of his force from the principal point." He points out sagaciously that "a diversion usually brings the war into a new region, and calls out local military force otherwise in abeyance." It thus really adds to the enemy's strength. These words are very true of attacks on the Dominions of the Empire, whose local forces might not otherwise have an opportunity of fighting the enemy. Such attacks are not likely to be made by a weaker Power at war with England, as it would probably not risk its troops in distant and fruitless enterprises.

Attacks of this nature have been made against the United Kingdom, but only in the hope of finding a disaffected population and helping to raise local rebellion. Such were the landings of a Spanish force in the Highlands in 1719, and of the French at

Kilala in Mayo, and at Fishguard in Wales, during the Revolution, all of which ended in the surrender of the forces.

It will now be understood that an attack by sea on any portion of the Empire, however well planned and successful, would have but small effect on the war as a whole, while diverting force from the main operations. Such a *Diversion* is an operation wasteful of force, and not devoid of serious risk, unless carried out on a very small scale, when it would merely amount to one of the *Raids* to be now discussed.

The leading German strategist, von der Goltz, in his Nation in Arms, p. 430, says: "The fruit of oversea expeditions will but rarely counterbalance the disadvantages due to the weakness they cause."

If an invading army in transports is liable to attack by its enemy's warships, it will be oppressed by a sense of impending disaster. In 1862, M'Clellan's army invading the South was engaged for three weeks in landing at Fort Monroe. The Comte de Paris,

a French prince accompanying it, writes of "men's hearts beating fast whenever smoke was seen on the horizon," so dreaded was the possibility of naval attack, although the Federal Fleet was assembled to protect the transports. The nervousness felt when Command of the Sea is not assured is noticeable in the invasion of Cuba by the United States in 1898. The expedition comprised 16,000 troops, with only twenty-six guns and little transport, carried in thirty-two transports. After waiting until the sea was thought to be clear of hostile ships, the convoy started, escorted by fourteen men-of-war, but a baseless rumour of the approach of Spanish cruisers made it return to port, where it was detained for six days. When at last on its way, the helplessness of the transports, and the difficulty of moving them in any order, were very marked. The convoy steamed in three straggling columns, at some seven knots an hour, with many pauses to let it close up. The rear vessels were sometimes lost to view for hours. The troops were crowded, and the heat severe. Water began to run short.

The expedition took several days to cover the distance of 848 miles to its destination, and on reaching it the disembarkation was a scene of confusion rarely seen in war. The transports had only three to five boats, only eight having a few more. Troops and stores were flung pell-mell on shore; officers could not find their commands, nor the troops their equipment. The landing took three days, and, had it met with resistance, disaster would have resulted.

The Italian expedition to Tripoli is a recent example of the difficulties attending invasion, even under most favourable conditions. Mr Hurd thus describes them in his Command of the Sea: "Against an unprepared enemy, surprised by a sudden ultimatum, followed by war in twenty-four hours, Italy had the following advantages:—ample time for plans and preparations; a great amount of shipping available; a large army; the entire support of public opinion, and

undisputed Command of the Sea. The expeditionary force comprised 25,000 infantry, 1000 cavalry, and 100 guns, in 60 transports. The distance it had to traverse from Naples to Tripoli is only 500 miles. The first troops were landed twelve days after war began, and the whole disembarkation was only completed twelve days later, although no interruption by the enemy, or the weather, supervened."

This example enables us to form some idea of the time which would be taken by an invasion on a large scale, moving over a greater distance, and under less favourable conditions. Time tells in favour of the defence, enabling naval measures to be taken against the invasion on the sea, or military ones to defeat it on land.

CHAPTER XVI

ATTACKS ON THE EMPIRE

(continued)

"The course of hostilities between two powerful antagonists is affected little one way or another by raids, even on a considerable scale."—Sea Power, by SIR C. BRIDGE, p. 170.

Turning now to hostile attacks on a smaller scale against the British Empire, we still find conditions limiting their strength and effect. A military expedition not strong enough to hold its own against the defending land forces cannot hope to effect a permament lodgment on a hostile coast, and is only capable of temporary action on shore. It must therefore be classed as a Raid, which has been defined by Sir George Clarke (Fortification, p. 171) as "an attempt to seize by surprise some point on, or close to, a coast-line, with a view to inflict an injury—moral or material—which might cripple,

or at least diminish, the fighting resources of an enemy."

Two considerations, sometimes overlooked, tend to limit the strength of any oversea expedition not amounting to an invasion. In the first place, it is most unlikely that battleships will form part of the naval force. Any Power at war with Britain will need all its battleships in the inevitable fleet actions on which depends the decision of the war, and will hardly be so unwise as to send even one away on an enterprise of secondary importance. Besides, foreign battleships have as a rule but small coal capacity, and are thus not suited for long voyages. Colliers may accompany them, or meet them at prearranged points (as in the tour of the American fleet round the world in 1908), but coaling is difficult and uncertain at sea, and limited at neutral ports in war. It took seven months for the Russian battlefleet to steam from Europe to its ruin at Tsushima in 1905, and it had to coal eight times at sea, and as many times in neutral

ports. The naval attack to be expected on British territory overseas will thus probably be limited to such ships as can be spared from the battle-fleet, that is, the smaller cruisers.

In the next place, troops cannot be carried in warships, whose limited accommodation is all taken up by naval requirements. To carry extra men, especially useless landsmen, crowds a warship and seriously hampers her fighting power, besides adding to loss of life in action. The classic example is the Spanish Armada, where the great ships carrying troops were a prey to the more active English men-of-war. We notice this also in the movement to the Crimea. "None of our ships-of-war carried troops on board; they were all therefore ready for action. The French ships were doing duty as transports, and were not therefore in a state for going into action" (Kinglake's History of the Crimean War, chap. xix.). Neither Americans nor Japanese, in their late wars, carried any troops in warships.

Therefore transports must be provided for

any troops required for an oversea expedition, which will increase its size and reduce its speed, thus making it more likely to be detected and intercepted, and adding to the difficulty of coal supply. If an expedition comprises a number of ships, and slow ones, it partakes of the drawbacks attending invasion. To effect a raid the enemy must limit the number of ships, as success depends on secrecy, rapidity, and surprise. The larger a raid the more certainly it forfeits these advantages. Raids on the coasts of the Empire will hardly be attempted with more than a few light cruisers, possibly accompanied by a swift transport.

A raid must be aimed at points which offer some inducement to attack, or it will not be worth attempting. Such points may be seaports of importance, or a coast rich in resources. The object may be to capture a harbour as a temporary naval base, but troops will be needed to hold it. The more usual object of a raid would be to seize or destroy coal and any shipping there may be in the

port, or any warships in dock, and to ruin docks and dockyards.

A raid would seldom now be made with a purpose of little effect on the war, such as merely to alarm or mortify the enemy and to inflict loss and suffering on his coast population. It is often imagined that a possible object for a raid might be to exact money or supplies from a city under threat of destruction, but it is to be hoped no British citizens would tamely pay such blackmail.

Whatever the object of a raid, it will be necessary to enter the port, or at least to fire into it; and to attain this end, if the entrance is defended by batteries, the naval commander must attempt:—

- 1. To land men.
- 2. To engage the coast batteries.
- 3. To bombard the port, avoiding the batteries.
- 4. To neglect the batteries, and run past them into port.

The difficulties attending these several operations will now be discussed.

Naval officers do not favour landing their men to fight ashore, where they are liable to suffer loss, or to be cut off by bad weather. Each man has his function on board, and if many are away the ship is less efficient for fighting. A naval commander will not land many men, nor for long, if there is the least chance of his squadron having to fight. This will be an ever-pressing anxiety for a raiding enemy off any coast of the British Empire, as he must be prepared for attack by sea at any moment.

If the enemy at sea is known to be far away, or, better still, to have no navy, parties can of course land without sea risk. When British Naval Brigades have engaged in land operations, as in the Crimea, in China, in Egypt, and in South Africa, it was against an enemy without a navy, and sailors have also, of course, often operated on land against savages, as when Sir Harry Rawson took his men to Benin.

The object of a landing party would be either to capture the coast defences from the

land side and so open the port to the warships, or to raid the port and damage docks or shipping. But the difficulties met by a landing party ashore are serious. The landing place cannot be near the port, as it must be out of range of any batteries guarding the entrance, and out of sight of the port if the operation is to be a surprise, for it can hardly succeed in face of resistance. The march to the port will thus be one of some miles, but the party will not dare to move very far from shore for fear of being cut off, either by the enemy or by the sea getting up, and its march will be greatly impeded by any small local force which may be assembled to stop it. Having no horses, any guns landed must be man-hauled.

On reaching the port, the party must avoid getting entangled in street fighting, where it will be at great disadvantage. Even large military forces avoid operating in cities. In 1870, after the surrender of Paris, the Germans only entered the city with a few troops, who penetrated no further than the open

space of the Champs Élysées, to avoid danger of street fighting. In 1807, 5000 British troops who entered Buenos Ayres became hopelessly scattered, and were captured after losing heavily. Later operations in the city with a larger force fared no better. Nelson's one failure was at Teneriffe, where his party engaged in the town had to surrender, although his own conduct in the darkness and dangers of that disastrous night was heroic. Landing parties from ships are thus seen to be an overrated danger.

A naval force trying to enter a defended port must expect to meet the fire of heavy guns in permanent batteries, possibly supplemented by mines in the entrance channels, and by torpedo-boats and submarines. Putting the latter aside, and assuming there is no local squadron at hand to be taken into account, let us consider the conditions under which warships engage the coast batteries in order to silence them and open the way into the port. This is an operation seldom successful in history, unless a large naval

force was employed, as when coast batteries were overpowered by British fleets at Tunis in 1654, at Teneriffe in 1656, at Algiers in 1816, at Acre in 1840, and at Alexandria in 1882. In the American Civil War, too, we find instances of coast defences crushed by the continued fire of a large fleet. But failure has more often been the result of attacking shore guns. The great Spanish bombardment of Gibraltar in 1782, elaborately prepared, was a disastrous fiasco, and the mortar vessels specially built for the operation were all destroyed. Little effect was obtained by the British Fleet engaging batteries in the Crimea, or by the American Fleet in Cuba and Puerto Rico. In 1863 the Federal bombardment of the Charlestown defences failed, with great damage to the fleet.

Present conditions give no prospect of any greater success against shore batteries. In 1904 Admiral Togo was careful not to expose his ships to the Russian guns at Port Arthur. It is agreed that a few moderate guns in suitable batteries, if served by trained and disciplined gunners, will keep any cruiser out of the port they defend, and probably deter warships from attacking at all.

The reason for the inferiority of ships to coast batteries may be explained in part by the fact, often overlooked, that warships are not designed or constructed to engage shore

guns, but to fight other ships.

It is harder to get correct range from a ship than from the shore, and the ship presents a better defined and more vulnerable object to fire at than the battery, if the latter is well designed and ill defined by its background. In a battery only the gun itself is vulnerable, as the men serving it and the gun-mounting are shielded, and magazines are safe underground. Every shot striking the parapet or going over is harmless. ship, on the other hand, will suffer greatly from the plunging fire from shore guns on high sites, or the "high angle" fire of howitzers, whose shells fall nearly vertically. Ships also have far less ammunition than a

well-found battery, and cannot afford to fire it away, lest the next sea fight should find them with depleted magazines.

There are thus grave objections to ships engaging coast batteries. It may be said that for a naval officer to place his ships under the fire of the shore guns is gratuitously to add those guns to the enemy's naval strength, which he has to be prepared at all times to meet. Complete success would poorly compensate for defeat in the next naval battle, owing to want of ammunition, or injuries to ships and loss of men inflicted by the shore guns. In July 1898 the American Secretary of the Navy telegraphed to his Admiral off Cuba: "The U.S. armoured vessels must not be risked." This danger weighed heavily on Admiral Togo in front of Port Arthur, and kept him at a distance from the Russian batteries. A fleet which had engaged coast batteries might be so weakened as to succumb to a weaker one at sea, and the defeat might begin to turn the balance of naval supremacy, and have farreaching effect on the war, for which no local success could compensate.

The classic instance of this result is the defeat of the Italians by an inferior Austrian fleet at Lissa in 1866. The Italian fleet had undertaken to land troops and attack coast batteries, with no regard to the presence of an Austrian fleet 150 miles away, and, being attacked while engaged in shore operations, was badly defeated by a weaker fleet.

The fact is, that to attack coast defences is seldom a correct object for naval action, as soldiers and the public seem to imagine. Captain Jackson, R.N., in a lecture, "Ships versus Forts," laid this down definitely: "The consensus of naval opinion appears to be that no naval attack will be made on a fortress unless the attack is absolutely free from fear of interruption." Coast defences are therefore mainly deterrent in their effect; and the action of warships against defended ports will take the shape of stopping their use by blockade rather than of attacking them.

Bombardment, or shelling a seaport town,

must be distinguished from the operation just described—the endeavour to silence batteries by fire. The place bombarded makes no reply, but lies helpless under the storm of shell.

The damage, however, which bombardment can effect is generally exaggerated by those who have never investigated its actual results in history. The effect on a city has always been trifling. No great damage can be done by firing into a large area, of which a great part consists of open spaces, streets, and unoccupied buildings, where shells will burst harmlessly. The Germans in 1870 bombarded Strasburg without compelling its capitulation. Later, they brought to bear on Paris five hundred siege guns, which threw half a million shells into the city with but little damage to life or property. The Parisians only laughed at the shells. bombardment quite failed in moral effect, and prolonged the war by its waste of time and effort. At Ladysmith, thousands of shells were fired into a small town full of troops, but with insignificant effect. The same was

the result at Mafeking and Kimberley. So much for the *effect*,¹ but the *difficulty* of bombarding is also considerable.

Bombardments are generally at long range, and it is often necessary to fire over intervening land, so that it is seldom possible to note the effect of each shell, by which alone the fire can be accurately directed. The expenditure of ammunition needed to produce an effect is therefore enormous, while every shell fired is one less in the naval action for which warships must always be prepared. Each shot also injuriously affects the gun, a serious matter, as guns can only be retubed, or replaced, in one of the great home arsenals. The U.S. Navy were ordered to avoid bombardment in the Cuban war "lest tubes be rendered unserviceable by firing a comparatively small number of shotted rounds." The useful "life" of a large gun is short, and very few rounds reduce the accuracy of its fire.

Naval bombardments are rare in history,

¹ The present war will probably lead to a modification of this universally accepted view.

and have never been undertaken except by the Power superior at sea, and when no naval action could interrupt. Their effect will be trivial in proportion to the number of shells fired, and they are likely to produce reprisals on the bombarder's own coast-towns. As Sir George Clarke remarks, "a superior navy at a distance from its base will find no profit in wasting shells on a city, and a weaker one will leave cities alone." In short, a bombardment is mere mischief, a mistaken use of naval strength to no purpose, promising little result on the spot, and less on the course of the war, while entailing waste of ammunition. It is seldom likely to be undertaken, and its danger is one of the popular delusions about maritime war.

It may be attempted to neglect the shore batteries and run past them, but only if uncommanded water can be reached beyond. The attempt is not unlikely to succeed under favourable conditions, but it is futile if the batteries command a long channel, or the whole water area inside. In any case, the fire of the guns is likely to damage the ships as they pass, unless the attempt is made in thick weather or darkness. But the difficulties of navigation will be great in any channel which is not straight and broad, and whose buoys, marks, and lights are removed, while at night the defence search-lights will show up the ships and blind the navigators. In the American Civil War the Northern admirals sometimes ran past batteries, and in 1878 the British Fleet went up the Dardanelles in a snowstorm, which hid ships from the land, but also from each other, and caused the flagship to run aground. The operation is difficult and hazardous.

Supposing, however, that the ship has run past the batteries at the entrance to a port, and reached safe water, what can she effect? The utmost will be to destroy shipping and dock-gates by torpedo or shell fire. Ware-houses and dockyards could perhaps be shelled and burnt, but the futility of firing into the town has been noticed when discussing bombardments. Any further object can only be

attained by sending armed men ashore in boats, under cover of the ship's guns. To seize coal and stores, or lay the city under contribution, necessitates communication with the shore. But boats will not be able to move about a port with impunity if a lookout is kept against the attempt and even a scratch force of a few rifles can be hastily collected. The fire of rifles, and still more of machine guns, will have serious effect on men crowded in boats. If dispersed among rocks and scrub, or hidden in buildings and enclosures, they would suffer little from the ship's guns. A field-gun, firing shrapnel from a concealed position back from the shore, would destroy boats, sweep the ship's deck, and penetrate her ports, while any shell would pierce an unarmoured cruiser and make her soon shift out of range unless she could find the gun with her fire.

Running past batteries might be attempted by small craft—torpedo-boats, steam launches, or rowing-boats-under cover of night, fog, or rain; but landing from boats will be made

under the disadvantages just stated, and without the support of gun fire. Such an operation is only possible as a sudden hasty attack, very fortunate if it succeeds.

To sum up, modern naval views point to these conclusions:—

- 1. Landing parties can effect little ashore.
- 2. Ships engage coast batteries at great disadvantage.
- 3. Bombardment is useless and wasteful.
- 4. To run past shore guns is risky and unprofitable.

An examination of the means available for ships to attack the land gives therefore little ground for the popular idea that there is much to fear on shore from the presence of hostile ships off the coast. Raids are only practicable under two conditions, that the defender's ships are too far away to interfere, or that the resistance on shore is insignificant.

Under such conditions raids are likely to be undertaken, and have been constantly effected with success by England, whose naval superiority rendered them immune from hostile interference at sea. But on the part of the weaker navy they have always been rare, and seldom fortunate. In the future, raids will run more risk than ever, owing to the fact that the telegraph will give earlier warning of their movements and steam make naval interference with them more certain than of old.

If the raid escapes being overtaken on the way, and reaches its goal uninjured, its object must be effected without delay, before it can be interfered with. A British squadron may at any time arrive, and engage the raiding ships after they have wasted men and ammunition in attacks, or worse still, while they are actually engaging coast batteries, or have considerable landing parties ashore.

The factor of time presses hard on a raider. The only period he can count on for safe action is measured by the time taken for his attempt to become known, added to that required for British ships to reach the scene. The one advantage a raid has is that it can threaten one port and rapidly change its

objective to another, thus causing alarm, and perhaps effecting a surprise.

The result to be gained by raids will seldom warrant the effort they demand and the risk run, nor will the small success they may gain have any direct effect on the war. Raids will, however, be tempting to the weaker navy, and must be expected on British oversea coasts. They can best be averted by the provision of moderate coast defence and garrisons at important ports, with small mobile forces in central positions for prompt action at any threatened point.

PART VI THE ACTION OF THE EMPIRE IN WAR

CHAPTER XVII

THE POLICY OF LOCAL DEFENCE

"If we be once driven to the defensive, farewell might."
—SIR WALTER RALEIGH to Cecil, Secretary of State to Elizabeth.

The defence policy of the outlying portions of the Empire tends as yet, unfortunately, towards the provision of what is believed to be security at home. Public attention and expenditure are concentrated on local defence. This attitude, although honestly adopted by the unthinking, and not unnatural for the "man in the street," is at bottom a blind and selfish one:—blind, because it hugs the illusion that safety can be attained by local defence;

selfish, because it aims only at personal security, and not at helping Sister-Dominions in danger, or dealing a counter-stroke to any disturber of the general peace of the Empire.

With regard to the first point, the sufficiency of local defence, the question for each Dominion to ask herself is: Can she hope to repel invasion, and safeguard her soil, by her own unaided efforts? Admiral Henderson, in his naval scheme for Australia, has answered this question: "Once the command of the sea lost to the Empire, no local system of defence, naval or military, could ensure Australia's autonomy, and she would be the prey of the strongest maritime Power."

The fact should be faced that no Dominion of the Empire can ensure her own safety in war by anything she can do in the way of local defence at home. For the security of her soil, and still more of her trade and external interests, she has in the end to depend on the help given by Sister-Dominions or the Mother-Country. Has a Dominion any claim to receive this

help unless she is prepared to render it in her turn to the others, by joining her sea and land forces with theirs for combined action against the enemy? Moral obligation, ties of race and sentiment, might well dictate such mutual action on the part of all the Dominions, even if the interests and the security of each one did not imperatively demand it

The illusion of the supposed efficacy of local defence does not lie only in the weakness of any one Dominion against a powerful enemy, owing to its sparse population and slight resources for war. It lies deeper. Local defence sins against an important principle of war-the necessity of concentration of force. If a force instead of being kept together is split up in order to defend scattered points, a concentrated enemy, even of less strength, can in succession overcome each portion separately, or, as it is termed, "beat each in detail." This needs no proof. It is clear that a dozen police, helpless against a large band of anarchists, could

arrest them by twos or threes in their separate homes.

The only way for defending a scattered Empire without running this danger is to post at each point likely to be attacked the minimum defence absolutely required, and to concentrate the bulk of the force so that it can fall in superior strength on the enemy. This has always been the principle underlying British naval strategy, and dictates today the distribution of the Navy. Mahan emphasises the necessity "of regarding local and general interests in their true relations and proportions." Mere local defence applied to all portions of the Empire means the pitiable policy of the weak defensive everywhere, doomed to succumb ignominiously to a vigorous attack on any one point.

A Dominion which only tries to ensure her own defence will find, if attacked, that she has forfeited the power of counter-attack on the enemy, and will be lost unless her remissness is remedied by the efforts of the

rest of the Empire. Her passive defence will in itself be no safeguard against attack by a powerful foe, and will contribute little to the defence of the other portions of the Empire. For the policy of local defence violates one of the best-established principles of war, the essential weakness of passive defence. As Napoleon observed, "No scheme of defence can be considered effective which does not provide means of attacking the enemy." Admiral Mahan writes in the same strain: "In the matter of preparation for war, one clear idea should be absorbed by everyone who desires to see his country ready. This idea is, that the assumption of a simple defensive in war is ruin."

The fact is that no defence is efficacious unless it contemplates an attack on the enemy at some place or some time. The right way to defend a world-wide Empire like the British is to consider the possible theatres of war, and then decide where to strike. All parts of the Empire will be defended indirectly but effectively against serious efforts of the enemy by the very force of the attack on him elsewhere.

The spirit of the offensive—the instinct to attack the enemy when he himself threatens—has inspired the seamen of England throughout the brilliant history of her Navy. In 1588, Lord Howard of Effingham, when charged with the defence of England against the Armada, wrote to Elizabeth's minister: "The surest way to meet with the Spanish Fleet is upon their own coast, and there to defeat them." Sir Francis Drake, too, said: "My opinion is altogether that one shall fight them much better cheap upon their own coasts than here."

The same spirit of the offensive is seen in the despatch of scores of British expeditions overseas and in the methods of the British Army during its constant wars in India. The offensive is now universally preached in modern war-schools, after the example of Napoleon and his later imitators, and has always been the root policy of British defence. An enemy energetically assailed will obviously not be able to devote much force to an attack on the Empire. Any operation of that nature can only be on a small scale, and would only amount to a raid to inflict local damage, or at best to a diversion; that is, an attack made to divert British forces and efforts from the main operations. An expedition on a larger scale would gravely diminish the enemy's total strength.

For the fact should be grasped that no nation in the world can attack any portion of the Empire with impunity. Such an act of aggression would at once engage that nation in a gigantic contest with England. It would bring on a war of a most serious and far-reaching character, to be waged in every part of the world, and to continue perhaps for years; in fact, a war like the long and vain efforts of Louis XIV. and Napoleon to crush Britain. Such a war would be a serious matter for any enemy, however powerful, and he would have to concentrate his forces, and use every effort, to have hope of success. The problem before

him will not be how best to deliver an attack, but how to hold his own in a very serious war, which will press hard on him not only in his outlying possessions, but in his home waters and in his home territory. The strength in which an enemy can attack must therefore be measured, not by his total force, but by what he can spare while engaged in war by sea and by land against the British Empire.

An attack on a Colony or a Dominion of the Empire would be merely an episode in greater and more vital operations, and an episode which would have but an indirect and secondary effect on the main war, while forming in itself a proceeding not devoid of risk, unless planned on a small scale. Now, an operation with no direct bearing on the result of the war, if successful, and one which weakens the available force in more important theatres of war, and also entails risk to the force engaged, is strategically unsound. A well-advised combatant would not be likely to undertake it. Were he to detach part of

his forces on a distant expedition, he would reduce his chances of success in the main war, without which he can have no hope of being able to snatch away any possessions of the Crown. For an enemy has to face the fact that to conquer a British possession it will first be necessary to overcome the naval superiority of England. This done, it will be easy to conquer portions of the Empire in detail. For none of them could well hope to resist a coalition so powerful as to have succeeded in overthrowing Great Britain, a gigantic effort implying enormous strength, against which no local forces, however brave and patriotic, could avail.

CHAPTER XVIII LOCAL DEFENCE

"A state consists of men, not of fortifications."— THUCYDIDES, vii. 77.

THE local land defence to be provided may be considered under two heads, troops and works, never forgetting that men are more important than material defences. neither possible nor necessary to fortify all the harbours or vulnerable points of a coast. Works are only needed to defend the entrances to naval bases and commercial ports of importance, thus guarding the dockyards and marine resources of the country. The defence works needed are a few batteries, well sited and designed, and armed with two medium guns manned by trained gunners. Some infantry, with machine guns, should be available to defend the batteries against land attack, and to guard the port

have in England been given up; they form an expensive and uncertain defence, dangerous to friendly ships. Admiral Sir Cyprian Bridge deprecated "putting down mines to block the harbour not only against the enemy but against our own ships." An American naval officer remarks of this decision: "We need not wonder at it when we remember what an intolerable nuisance the mines in our own ports were to us in the Spanish war."

The object of local defence in the British Empire should be kept clearly in view. It should be so strong as to compel the enemy, if he comes at all, to come in such strength that his expedition will be too large to escape detection, and will therefore be attacked and destroyed by the British Navy. A smaller expedition which might evade notice and escape attack at sea should not be able to do much harm on shore in face of the local forces. But the preparations against such raids should not be greater than is necessary to meet them.

Works and garrison forces for local defence

should be kept at a minimum. They absorb officers and men who would be valuable in the field army, where they could be actively employed to good effect, and turn them into sedentary troops who will probably never meet the enemy. Defence works are extravagant and unnecessary for a nation possessing sea supremacy. They are essentially the defence suitable to a weak naval Power. On British coasts they should be limited to what is absolutely necessary. As Mahan says: "Local safety is not always best found in local precautions."

Local defence need therefore not be provided on a large scale. It is an extravagant measure for security, entailing the costly provision of heavy concrete works on expensive sites, with their magazines, guns, and mountings, and of perhaps submarine mines and coast-defence vessels, with all the personnel they require. It is no doubt necessary to allot some troops to coast defence, but the fewer the better. Admiral Sir Cyprian Bridge, in his Sea Power, asks: "Are local naval forces then of much use?" and replies,

"To say the truth, of very little." This blunt remark applies also to land defence forces. A port cannot be really defended except by the Navy at sea. The place itself may be made safe from capture by fixed or floating defences, by guns and mines, by torpedo-boats and submarines. But if the enemy commands the seas outside, its utility disappears, and it virtually ceases to exist as a port, no less than if it had been captured. Trade afloat cannot be protected by local defences, nor by local navies, for more than a fraction of its long course.

Sir George Clarke writes, in his Fortification, p. 168: "Coast defences may become sources of weakness by diverting expenditure from essential requirements . . . warping national aims, and misleading public opinion. The palpable and visible means of protection that coast batteries seem to provide appeal to uninstructed minds with much greater force than the seagoing navy and the field army, on which national security must ultimately depend."

England sets an example to the rest of the Empire in the fashion in which she understands her duties of Imperial Defence. For local defence she has a large Territorial Army, well organised in complete units, and also garrison forces and defence works sufficient to protect her numerous ports at home. But she has never thought of stopping there; whereas the military schemes of the self-governing Dominions show as yet no sign of going beyond such local defence, and contribute little to the defence of the Empire as a whole, the burden of which lies at present on the Mother-Country.

For purposes of true Imperial Defence England keeps up a great Navy ready to act wherever needed against a disturber of the Empire's peace, and a field army organised for service in any quarter of the world. She also provides garrisons and defences to guard a number of naval bases both at home and abroad, entirely for the service of the Navy. In all this England is undertaking what no

¹ For details, see Appendices D and E.

other great Power attempts. Her Navy is equal to any two in Europe; and her "Expeditionary Force," prepared for action oversea, has no parallel in the armies of other nations, intended as they all are to defend the home country, and not available for action beyond its frontiers, except to attack immediate neighbours. As Lord Haldane said in the House of Commons, 10th February 1909: "There is no army in the world of an oversea character which compares in magnitude or in training with the British." We thus see how England understands the obligations of Empire, even if they are as yet imperfectly realised by other portions of the Empire.

Of these, India alone does her duty in providing not only a large and efficient army for home defence, but also organised forces for the action overseas which she has so often undertaken in the past for Imperial purposes. Her example might well be taken to heart by the self-governing Dominions. They should imitate England on a smaller scale, and be prepared to undertake a due share of the defence

of the Empire as a whole, in proportion to their population and interests to be defended.

To decline to face this duty is to remain, no matter what may be done for local defence, dependent on England for ultimate safety, and content to be "a parasite on the trunk of Empire," to use a bold expression of a Governor-General of Canada to a Canadian Let no dominion overlook her obligations to her sisters and to the Mother-Land. The latter, at any rate, is not shirking her duty to her daughters, and is resolved to shield them, whether they help or no. If ever in some future century England be overwhelmed by a great coalition of nations which have outgrown her, the British Empire may become "one with Nineveh and Tyre," but England will sink knowing that no failure on her part has brought about the catastrophe. Let the self-governing Dominions, proud to-day of taking their destinies in their own hands, take steps to ensure that History can never make them responsible for the ruin of the Empire.

CHAPTER XIX

CO-OPERATION OF THE DOMINIONS IN WAR

"A sounder national patriotism knows that the safety of the parts depends on the safety of the whole."

GEORGE PARKIN.

We have seen that purely local defence provides no security for the different portions of the Empire, and we are forced to the conclusion that the only safety for the whole, and for each part, lies in united action. As stated in the report of the last Imperial Conference, "If we all grasp the idea of mutual support by land and sea, the time cannot be distant when we shall be practically unassailable."

Sir Charles Dilke in his Problems of Greater Britain pointed this out long ago: "The first step towards safety must be the arrangement of plans for supporting the whole

edifice of British rule by the assistance of all component parts of the Empire. As all have helped to raise the fabric, so may all combine to secure it by the adoption of a settled plan of Imperial Defence."

This idea had even earlier been put forward by many great statesmen. As long ago as 1808, Sir Charles Pasley of the Royal Engineers, in a thoughtful essay on British war policy, foresaw the latent might of a united Empire: "The strength of an Empire will be in proportion to the facility with which its several parts can afford each other mutual assistance when attacked." In 1854, Joseph Howe, one of Canada's wisest statesmen, the champion of responsible government for the Colonies, said in his Organisation of the Empire: "We have no security for peace except in such an organisation of the whole Empire as will make the certainty of defeat a foregone conclusion to any foreign Power that may attempt to break it. The question of questions for all is, how the Empire can be

so organised and strengthened as to command peace and be impregnable in war."

This conception of the way to defend the Empire was held even by Gladstone, who, as long ago as 1861, thus addressed the House: "If England has supremacy at sea her colonial Empire is virtually safe. I have not the smallest doubt that as responsibilities are accepted by the Colonies they will be disposed to go beyond the bare idea of self-defence, and to render loyal and effective assistance in the struggles of the Empire."

We find an unusually early Colonial recognition of this duty in the Jamaica Colonial Standard of 18th July 1877: "Imperial and Colonial interests are identical, and it is the duty of both the Mother-Country and the Colonies to take a fair proportion of the labour and sacrifice which the preservation of the common heritage demands."

The true defence of every Dominion rests essentially on the fact that she forms part of the British Empire; everyone knows the old fable of the strength of a bundle of sticks and the weakness of a single one. As Benjamin Franklin said to his colleagues, when plotting the rebellion of the American colonies: "Gentlemen, we must hang together; for if we don't, we shall all hang separately."

Authorities are thus agreed that co-operation in offensive action is the correct policy of defence. Lord Haldane, when Secretary of War, thus summed up the true policy of Empire Defence to the House of Commons on 10th February 1909: "The only way to protect the Empire is to take the initiative, and to seek out the enemy at a distance, and defeat him by sea or land." There can be no doubt that, as in the past, any war in which the Empire may be engaged will be marked by strenuous and decisive naval action, followed by joint naval and military expeditions, in which the sea and land forces of every portion of the Empire ought to take part.

CHAPTER XX

NAVAL CO-OPERATION BETWEEN THE DOMINIONS

"Surely, at this day, the vantage of strength at sea (which is one of the principal dowries of this Kingdom of Great Britain) is great."—BACON, Essay xxix., "Of the True Greatness of Kingdoms and Estates."

There are now being formed throughout the Empire the elements which will eventually provide a truly Imperial Navy, ready and able to guard British interests all round the world by imposing caution on would-be enemies, or, if necessary, by attacking them. But in considering the function of this future Imperial Navy, formed by the union of the several navies of the Empire, it is important to note the remarks in Chapter IV. on the weakness of naval coalitions. They show how desirable it is that the Imperial Navy, though formed of the Navy of England, reinforced by those of the Dominions, shall

not be a mere naval coalition of allies, but a homogeneous whole. It may be desirable for each Dominion to create and administer a navy of its own in peace; but it is essential that all the ships of each Dominion should at once come under the control of the Admiralty at the outbreak of war, for it is at that moment that the distribution of the whole Navy and the co-operation of its several fractions most demands central control and co-ordinated action. Napoleon has told us that "nothing is so important in war as undivided command." The Navy has to oppose the battle-fleets and cruiser squadrons of the enemy with superior force, and to anticipate their movements by rapid decisions and prompt combinations. Unity of action, so necessary under circumstances constantly varying, demands unity of command. A central controlling authority is required to receive continuous intelligence from every part of the world, and to issue correct orders without delay for the operations planned on the information received. This central control is furnished by the Admiralty in London, and is delegated within their spheres to the commanders of fleets, or of naval stations, so that they may correctly co-ordinate the movements of the ships under their control.

In spite of the fact that, as Mahan says, "popular clamour exercises an immense disturbing force on rational dispositions," there should be no difficulty about the Dominions taking up the naval share falling to them, when the principle of co-operation between all parts of the Empire in war has been agreed to. As Sir John Colomb said in the House of Commons, 2nd March 1891, "it is the interest of every part of the Empire to keep the waterways free." No objection need be taken by the most ardent local patriot to his Government sending its ships away to join the Imperial squadrons, where their action will at the same time defend the trade of that Dominion on the high seas, and ward off from its territory all oversea aggression.

It is preferable to "carry the war into the

enemy's country," and thereby keep him away from our own. Admiral Sir Cyprian Bridge, late Commander-in-Chief in Australia, and one of the highest authorities on Imperial Defence, truly says, in his Sea Power, p. 254: "A country can be, and most probably will be, more effectually defended in a maritime war if its Fleet operates at a distance from, rather than near, its shores." This seems not to be generally understood, for, as the Admiral again remarks, "The demand that ships be so stationed that they will generally be within sight of the inhabitants is common enough. . . . Nothing justifies it but honest ignorance of those who make it; nothing explains compliance with it but the deplorable weakness of authorities who yield to it."

This "honest ignorance" was regrettably illustrated on the occasion of the launching of the torpedo-boat destroyer Warrego at Sydney in 1912. The Prime Minister spoke of the Australian Fleet as "having to watch at our gateways," and said that "Australia was

now entirely in the people's charge, and its protection in their care." The State Premier too said, "In launching this ship to-day we are protecting Australia." Both thus ignored the patent fact that Australia, with all her little navy, must still depend as of old on the British Navy for her real security. Not a word was said of the British Navy, which protected the settlement and development of Australia in the past, and is safeguarding her against foreign aggression to-day.

The main battle-fleet of the Empire is therefore now stationed, as always in the past, facing the concentrated naval force of our most likely foe, based on his home naval bases. This is obviously the only sound position. It enables our Fleet to watch the earliest move of our enemy on the outbreak of war, and to bring him to action at the first opportunity, when our superior force should make the result certain.

Unthinking folk have said that "England has withdrawn her ships from the oceans of the world to concentrate them in the North Sea for defence of her shores." This is a

double misconception. In the first place, the ships withdrawn were mainly old and small cruisers which were of no great value in war, and could certainly not be added to our battle-fleets. In fact, most of them were "scrapped" as useless, and their crews made available for better use in more modern ships. Weak and slow ships that "cannot fight and cannot run away" are better broken up. The only battle-ships withdrawn from distant seas were those stationed in China waters to watch the Russian Fleet. When it was destroyed by Japan, there was no need of the British battleship squadron, and it was replaced by one of armoured cruisers.

In the second place, the fleet in the North Sea is not placed there with any idea of directly protecting England. Our largest fleet must always be facing our probable foe in any sea where he may keep his main strength. The object of the British Fleet on the outbreak of war will be immediately to seek out the enemy and bring him to action should he be so confident as to dare the arbitrament of battle. Its presence to-day so close to our shores is an

accident due to the geographical position of our enemy. Those who think it is so stationed to prevent invasion should realise that during the whole of the nineteenth century our main fleet cruised two thousand miles away from England in the Mediterranean, where our most likely enemy kept his main naval force.

As regards any action being required in other seas, this possibility, though remote, is claiming attention, perhaps less on strategic than on political grounds. But it is generally forgotten that naval force is very mobile, and can be readily directed to any locality where its action may become needed, should change in alliances and foreign politics dictate any alteration in its distribution.

The latest pronouncement of the Admiralty on Imperial co-operation is that the Dominions should provide most of the battle-cruisers, and England most of the light cruisers, to form a single and powerful fleet, specially designed for defence of the Empire, and available for immediate action in any part of the world. Mr Churchill stated in the House

that such an Imperial squadron of battlecruisers based on Gibraltar could reach Halifax in 5 days, Jamaica in 9 days, Cape Town in 13 days, Vancouver in 25 days, and Sydney in 28 days.

As war cannot well suddenly occur without some warning being given by a gradual increase of international tension, this Imperial Service Fleet could be sent to the theatre of war by the time hostilities broke out. At worst, it would certainly reach any Dominion before the arrival of a hostile expedition, which could hardly be prepared, still less despatched, without the intention becoming known to the Admiralty.

In addition, it is hoped that the Dominions would provide locally the bases and dockyards, and also the "ancillary" vessels (destroyers, torpedo-boats, and submarines), to "enable this Imperial Service Fleet to move rapidly without encumbering smaller vessels, and to operate for a prolonged period in any particular theatre where it might be required." This latter suggestion has long been put

forward by the Admiralty. Its object is to avoid the necessity of a fleet operating in distant waters having to bring out its own "ancillary vessels," which are slow and ill fitted for long ocean voyages, although desirable auxiliaries for effective action. This scheme has the advantage that such ancillary vessels provided by each Dominion in its home waters provide at the same time exactly the best form of local defence against raids on its coasts or its trade.

The "Imperial Service Fleet" was designed to comprise eight battle-cruisers. Two are already provided by New Zealand and Malaya, three are offered by Canada, and it is to be hoped eventually that others will come from Australia and South Africa. In the meantime England would make up the balance. To create such a Fleet would be the soundest strategy, of benefit to the whole Empire, and it will be a pity if the ill-formed opinion of the people of any Dominion should block it, and insist on the ineffective substitution for it of a small local navy. That, for instance,

at present seen in Australia is a small hybrid squadron of one battle-cruiser and two light cruisers, and even when doubled will be about as reasonable as a team of elephants and mules in harness. It will be either too little or too much. Too little, because perfectly powerless to oppose the fleet which a Naval Power could send to Australia; too much, if only raids against coastal ports and trade have to be met.

The Admiralty, it is well known, has only given its official endorsement to such a scheme to meet supposed local desires. The editor of the Journal of the Royal Colonial Institute, in the May number of 1913, pointed out that when the Admiralty modified its attitude in 1907 and 1910, "it has confessedly done so out of deference to the political susceptibilities of the Dominions, and at some sacrifice of strategical ideal." Those who may be inclined to pass lightly over the sacrifice need to understand that to adopt a course strategically the less sound one, is wilfully to reduce strength in war.

It is not only extravagant, because it throws away strength which has cost much, but dangerous, as that strength may be badly wanted in the day of battle to ensure success, or to derive the best advantage from victory. New Zealand has taken the wiser course in sending her battle-cruiser to act with the battle-fleet, and the present Canadian Government is bent on this policy, which would provide enormously greater real protection to every Dominion than could any local naval defence, besides effectually supporting the cruiser protection of the great flow of trade in which each Dominion is so vitally interested. Mahan pointed this out in 1891: "All the Dominions need the Channel and Mediterranean Fleets. These effective, there will be no danger to the territory, and little to the trade of the Empire."

The citizen would not of course be able to see his own ships and flatter himself that they were "guarding his shores." The question for him to face is, does he like to think he is protected by the naval force he

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pays for, or would he like to be *really* protected? Sir Wilfrid Laurier recently said, "Defence, like charity, begins at home." It is curious to think where Canada and the Empire would have been if England had acted on this futile and selfish aphorism.

CHAPTER XXI

MILITARY CO-OPERATION

"For warlike men are the rampart of a State."
ALCÆUS.

To organise co-operation between the land forces of each portion of the Empire in a great war is more difficult than to combine the various navies. The strain of providing naval co-operation is mainly financial, as but few men are required, while a "division" of troops would comprise ten times as many men as the squadron which might correspond to it as a reasonable contingent for some Dominion to furnish.

It is clear that the military co-operation of the Dominions and of the Home Country in oversea expeditions cannot be effected by purely localised forces, precluded from action outside their own country, like the "Territorials" of Britain or the Militia of the

Dominions. The expedition must be formed of troops available for service oversea, and prepared and organised for such work. To this end England keeps up her "Expeditionary Force" of 160,000 men. Until the Dominions of the Empire prepare, in proportion to their population, similar "striking forces" for service oversea, this work will have to be done by the Army of the United Kingdom alone.

The Dominions of the Empire possess great latent strength for war in the number of their young men of intelligence, courage, and self-reliance. Many of these must possess in a high degree the spirit of adventure, love of fighting, and high careless courage which have distinguished their British forebears, and a considerable number would no doubt desire to take their part in wars where the welfare of the Empire and of their own country is at stake. Such men would be ready to volunteer for active service beyond their own home country, and a proportion of the territorial defence forces of each Dominion might well be organised

into an army of volunteers for active service abroad. Such armies from all the Dominions, in combination with the British Expeditionary Force, would form a true Imperial "striking force" for action in any part of the world where British interests have to be defended.

An army made up of volunteers, similarly raised and trained by each portion of the Empire, will be an efficient force and work well together. It will possess high moral energy when each man realises that he is guarding his independence and liberty, and securing the safety of his own home, however far away, by attacking the common enemy. Such patriotic armies under strong leadership have proved irresistible. Cromwell's "New Model Army" has never been equalled in moral and in its record of unbroken success. The armies of the Confederacy under Lee won brilliant victories against odds for two glorious years before they were slowly overwhelmed by the numbers and wealth of the North.

Such volunteers of the flower of the British Empire, and fighting for its cause, might well be compared with those marvellous armies of the French Revolution, which repelled invasion from every frontier of France, by an unparalleled exhibition of energy and self-devotion.

Of them Fox spoke some stirring words in the House of Commons on the 28th of May 1797:—

"They compel us to admiration by their vigour, their constancy, their spirit, and their exertions in every great emergency in which they are called on to act . . . it arouses everything that belongs to the soul as well as to the body of man: it makes every individual feel that he is fighting for himself, and not for another, and for his own cause, his own safety, his own concern, his own dignity on the face of the earth."

The inauguration of the principle of cooperation of all portions of the Empire was made when New South Wales sent a battery to the Soudan in 1885. This example was followed in 1899, when all the Colonies sent to South Africa contingents conspicuous for their hardihood and high spirit. It was found that Colonial soldiers could shift for themselves, and with their intelligence and individuality were quick to pick up the methods of fighting and all the ruses of that irregular war. The men used to riding were bold horsemen and good scouts. All were clever in use of ground, and, under officers in whom they had confidence, were sufficiently amenable to discipline.

But the Colonies sent only a number of small and unconnected contingents, which had to be received into the organisation of the British Army in order to be grouped in larger units, provided with Commanders and Staff, so as to allow them to be moved strategically to the point where they were wanted, and to be directed tactically in action. The Colonial contingents found, too, a system ready organised to furnish them with food, transport, horses, and ammunition; with surgeons, ambulances, and hospitals; with

pay, clothing, stores. Without all this, their courage, their zeal, and their intelligence could not have availed to place them against the enemy, or to maintain them in strength and efficiency. They must, through no fault of their own, have been immobile and useless.

All these considerations have been somewhat overlooked by the public in their appreciation of the assistance rendered to the Empire by its Colonial contingents. The real difficulties in forming an army do not lie, as usually imagined, in raising, equipping, and despatching men willing and able to fight, but in the organisation, administration, and staff work required to make them available at the front. To all this the Colonial troops had to give no thought. But if in some future emergency they were to reach the theatre of war organised in units, each complete with Staff, transport, and field ambulances, and if the unavoidable wastage of war were readily repaired by reinforcements in men and horses from their own country, their usefulness to the Imperial Army would be doubled.

In case of co-operation between the military forces of the great Dominions of the Empire with the Army of the Mother-Country in the future, it would also be helpful to know beforehand the strength and nature of the contingent which each intends to provide. A plan of mobilisation should, if possible, be made for the Empire, so that the numbers and arms of the service of each force can be laid down, as well as the time within which it can be expected to reach the theatre of war for operations. Without this knowledge, no reasoned strategic deployment of the forces of the Empire for war can be made; with it, every contingent will fit into its proper place as part of a homogeneous Imperial Army. All this does not mean that a rigid model is to be prescribed for each local force, or that its administration is to be interfered with. But it is important to bear in mind that all local forces exist to be used in intimate cooperation for a common purpose in which all are equally interested. If the Empire is to be considered a military alliance, it must

be remembered that an alliance presupposes not only willingness, but ability, to contribute an organised force on the part of both allies, and not of only one—the United Kingdom, as at present.

Without the least interference with the local control of its own forces by each Dominion, much of inestimable value in war could be easily arranged in peace. This can be seen on a large scale in India, where, without dictation from England, the Indian Government has often prepared and despatched invaluable contingents to assist the Imperial Army in war (see Chapter XXII.).

The creation of a General Staff for the whole Empire prepares a means to this end. By thinking out in peace the complex problem which war presents, it can prepare plans for action, and for co-operation between all the forces of the Empire. The General Staff will teach a common doctrine of war, and ensure sound strategic and tactical direction. It will provide one system and standard of the staff duties essential for com-

bined movements, and especially a uniform method of writing orders so as to be readily grasped and obeyed by all. Good staff work is essential for the efficiency and well-being of a force, and each man serving in the Army has a very direct interest in this work being well done.

All this demands no great expenditure or change in the constitution of the local forces from which the troops volunteering for service abroad will be drawn. What is needed is identical organisation, arms, and equipment; similar administration and military law; a uniform system of command and staff duties, and of drill and training for officers and men. In fact, what in machinery is called "standardisation of parts" is needed to ensure the efficiency of an Army composed of contingents from all parts of the Empire. Each Dominion might well provide arrangements for procuring horses, and factories to produce arms, ammunition, equipment, and military stores of all sorts, and would then be a base of supplies, of stores, and of reinforcements for the Imperial forces engaged in her neighbourhood.

The General Staff have laid down as follows "the principles upon which the military organisation of the Empire should be based":—

- 1. That without superiority at sea the Empire cannot be maintained.
- 2. That it is the duty of each self-governing portion of the Empire to provide, as far as possible, for its own territorial security.
- 3. That schemes of mutual assistance in time of need should be prepared upon a definite system.

The latter subject was discussed in greater detail in the Blue Book of the Imperial Conference, 1909 (Cd. 4948). It was pointed out that the efforts of the Dominions should be directed to "so adjusting their organisation for Home Defence as to admit of the despatch, without delay and without dislocation, of whatever forces they may be prepared to send to the aid of the Mother-Country or of any other portion of the Empire."

The first response to these hopes has been made by New Zealand, ever foremost in Imperial sentiment and action. Her Minister of Defence stated, in May 1913, that she "is desirous of being in a position to say to the Mother-Country that she has always at her disposal a permanent organisation by which about eight thousand men can be sent to any part of our Empire where their services may be required."

The military need of the Empire is not defensive preparation, but a mobile army ready to strike, wherever it can be most effectively used to influence the course of the war. Local forces kept at home are so many unconnected bodies of troops, deliberately forgoing all the advantages of mutual assistance. As long as the Navy is effective they will never be called on to fight, and will stand idle while other forces defend the Empire by acting abroad. If the Navy were to fail they would be but isolated garrisons doomed to a hopeless defence against overwhelming power.

CHAPTER XXII

SPHERES OF ACTION FOR EACH OF THE DOMINIONS IN WAR

"The British Empire is so vast and so unwieldy that it is all-important that the whole world should see that it has not overgrown its strength, but that it possesses quite as much energy and power at the extremities as at the centre, and that, if any vital portion of it is seriously endangered, all parts of it can simultaneously stir themselves to meet the emergency."—SIR GEORGE GREY, Governor, and later Premier, of New Zealand.

The desirability of joint action in war by all parts of the Empire had long been felt before 1909, when it obtained official utterance at the Imperial Conference on the Defence of the Empire, to which the Secretary of State for War wrote: "It is confidently anticipated that co-operation will be forthcoming from all parts of the Empire in time of need. . . . For instance, Australia and New Zealand are so situated that they might send troops to reinforce India, or the

garrisons of defended ports in Asiatic waters, at a time when it would be unsafe to despatch them from the United Kingdom by way of the Mediterranean. Similarly, South Africa might raise a force not merely sufficient for home defence, but capable of giving effective assistance in any military problems which might arise on the African continent. Canada is in the best position perhaps to render aid promptly should trouble arise nearer home, or to reinforce Australia" (Blue Book, Cd. 4948, p. 35).

Causes which might entangle the British Empire in hostilities are always existing. Apart from war for direct defence of territory, conflicts might arise from interference with British policy. The trading of the Empire is world-wide, and the clash of interests might be the cause of conflict with less civilised states. Problems vitally affecting the Empire in China, Persia, or the Turkish Empire may precipitate international conflict in which we must plunge to prevent partition of those countries, or to

safeguard our own interests. These regions thus form possible theatres of war in which our Army might be engaged, in close dependence on the support furnished by the Navy.

In the wide and complex net of world politics there are always tangled knots which form possible centres of friction. Circumstances difficult to foresee may intensify such friction till it smoulders and perhaps bursts into a flame whose ravages no one can foretell. In case of a war so arising no one Power could, with much hope of success, engage Great Britain, except perhaps on one of the land frontiers of the Empire. But a coalition of Powers is a possible contingency which the British Empire must be always prepared to face. Her Navy is kept up expressly at a strength to enable her to cope with any likely combination of two Powers, and to deal separately with the fleets of each at the same time, in whatever part of the world they may be.

If it be urged that a coalition of three Powers might attack us, we must remember

that this in itself would most probably cause at least one other nation to join us. The Powers are all opposed to each other by conflicting interests, and many of them by latent hostility. Every nation is jealous of the strength of its neighbour, and dislikes seeing him increase it by crushing another nation. Not one would allow the Supremacy of the Sea to fall from England into the hands of any other but itself. Neither Germany nor the United States, our immediate rivals for Command of the Sea, could brook to see the other take our place, and still less could France, Russia, or Japan acquiesce in Germany or the United States becoming the supreme Power of the ocean. There can hardly be conceived a triple coalition against England which would not create at least a double alliance to meet it. Thus England need not possess naval power superior to all others in order to keep her supremacy. As long as she can meet the strongest on equal terms all others will remain neutral, or, if necessary, even join her, so as not to destroy

a main factor in the international balance of power.

The allotment of the various forces of the Empire for all probable operations will no doubt be eventually laid down in detail, as the strength of the Empire develops and its united action in war can be definitely planned. At present it may suffice to indicate the spheres of action in war which each Dominion may regard as her own, and where each will find useful and effective opportunities for cooperating with the rest of the Empire, by sending her navy and field troops to join the Imperial forces.

Such operations of each Dominion in its sphere of action may be classified as follows:—

First, offensive, reinforcing the British Expeditionary Force in any attack on the enemy, or operating single-handed, where the proximity and strength of the place to be captured makes this practicable.

Secondly, defensive, landing a force to defend the territory of the Empire, or of her allies, against external attack or native insur-

rection; or helping to garrison some British fortified port, or any newly captured acquisition, abroad.

The offensive action is most directly useful. Within reach of each Dominion are tempting objectives in the shape of ports and colonies of foreign nations. These form possible bases of action against the Empire, and their seizure would be so obvious a benefit to the security of the adjacent Dominion that any objection to her using her forces beyond her own shores to capture them should be disarmed. The power of rapidly sending an expedition from the nearest Dominion against such places is a strategic asset to the Empire, and will prove a more direct protection to the territory and trade of the Dominion undertaking the duty than the best local defence.

India has long done her share in fighting for the Empire. Single-handed she captured Manila in 1762, Mauritius, Ceylon, and Java in the Napoleonic wars, and Peking the other day. She brought about the annexation of Burmah, Aden, and the Malay

Peninsula. Her troops have invaded Persia, Abyssinia, Uganda, and Somaliland. She took her share in the wars of 1801 and 1882 in Egypt, and has sent troops as far east as China, as far south as Natal, and as far west as Malta and Cyprus. India may confidently be looked to to provide expeditions for service anywhere in the Mediterranean, Indian Ocean, or Pacific.

Canada has the bulk of her population and resources on her Atlantic frontage, and will naturally act mainly across that ocean. Her navy would assist in the protection of British trade passing over the North Atlantic. With her soldiers she could reinforce British troops fighting in Europe, or in Western Africa. She would take on herself operations in the Caribbean Sea, where our West Indian Colonies might have to be defended, or those of the enemy captured. From her Pacific coast Canada might also send a force to co-operate in Empire wars in Eastern Asia, or in the defence of British possessions in the Pacific.

South Africa might find her opportunity of assisting in Empire wars by acting in East or West Africa to defend British possessions, or take those of an enemy. She could send a contingent to assist in the defence of Egypt, India, or Australia. It is obviously her duty to provide garrisons in war for St Helena, Ascension, the Falkland Islands, or Mauritius, to which she is the nearest Dominion. cruisers would naturally help in the defence of British trade in the important area around the Cape of Good Hope.

Australia would act in regions bordering on the Indian or Pacific Oceans, and in defence of British trade passing over those waters. Sydney is roughly in the centre of a semicircle, with a radius representing some three weeks' steaming, which may be drawn from Cape Town through Eastern Africa and Southern Asia to Japan, and thence down the west coast of America. This curve may be considered to comprise the sphere of action of Australia in war, and it includes many regions where Imperial forces may possibly

be engaged, and where help from Australia would be ready and welcome.

Australia is deeply interested in freedom of passage through the Suez and Panama Canals, in the "open door" of China, in keeping strong the British hold of India and Malaya, in preventing Russia getting a foothold on the Persian Gulf, or resisting the absorption by any great Power of the Dutch island empire so close to her gates. These interests would impel Australia to co-operate in any fighting necessary in those regions. She could hardly refrain from helping her Sister-Dominions in South Africa, New Zealand, and British Columbia, if attacked, and would willingly take charge of Imperial interests in the Pacific islands. She would find colonies and naval ports of the Empire to defend, or of enemies to capture, in the Indian Ocean or Pacific, cable stations like the Cocos or Fanning Island to guard.

The interests of New Zealand are identical with those of Australia, and that gallant little Dominion, ever to the fore when Imperial

interests are at stake, would not be behind Australia in sending her contingent where needed

The population of Newfoundland, the oldest Colony of the Empire, is so small that it is hardly to be expected she should do more than mobilise the reserve sailors her hardy fisherfolk provide in peace to the Navy on whose protection she entirely depends.

This sketch of the scope of action falling to the main portions of the Empire indicates how easily combined Imperial operations by sea and by land could be carried out, when all parts of the Empire really make up their minds to prepare to act together in war.

The gist of these considerations has been well summed up by George Parkin, the Canadian enthusiast for Imperial federation, and the organiser of the Rhodes Scholarships: "It seems a proposition fairly capable of demonstration that under the changed conditions of modern communication and naval war the vast area of the Empire and the wide dispersion of its parts, so far from being a cause of weakness, are really elements, under proper organisation, of a strength greater than any nation has ever enjoyed, a strength, too, which particularly recommends itself to the national mind, since it is effective for defence rather than aggression."

As the Empire now stands, its strength for attack, which is the only real defence of every portion of it, lies in the striking power of the British Navy and Army. The United Kingdom thus carries the burden of safeguarding the interests of all British inhabitants of the Empire. The Navy now burdens British taxpayers with fifty-one millions this year. The Army for striking oversea, with the forces required to hold Egypt and South Africa, and to garrison the defences of the naval bases and coaling stations, costs perhaps twenty millions, putting aside what is spent on purely home defence. Thus a third of the total revenue of the United Kingdom is devoted to the general defence of the Empire. This amounts per head to twenty-two shillings for the Navy

and twelve for the Military striking force. At that rate Canada would expend on war purposes, outside local defence, nearly twelve millions, and Australia over seven, or indeed more, if the present policy of buying labour and material in the dear market of a protectionist Dominion be maintained.

To sum up the consideration of both naval and military co-operation in Empire wars, the foregoing remarks should make it clear how little need there is anywhere of mere local defence, and how illusory is its supposed protection of local interests. The danger which might fall on any separate portion of the Empire must be met and crushed at its point of origin, by bringing the war home to the enemy. Such action will, it is obvious, be more rapidly and effectually carried out, if force from all parts of the Empire, and not those of the Mother-Country alone, are set in operation against the foe.

In such an effort for the preservation of the Empire and its world-wide interests, each Dominion can co-operate with her ships or her soldiers according to her geographical situation. The moral obligation to do so is no greater than the claims of self-interest and true patriotism, and the wealth and prosperity of the oversea Dominions leave them little excuse for refusing to participate in any war into which the Empire may be drawn.

As the function of the Imperial Navy in war has been defined as "to guard the seacommunications of the Empire, and destroy hostile fleets and trade," so the duty of the future Imperial Army composed of the troops of the Empire is to "crush in the field any forces hostile to the safety of any part of the Empire and to the welfare of the whole, whether those of rebellious subjects or external foes."

Short of this there is no other method by which the British Empire can be defended. Nor should it be thought that the principles of Imperial defence described in these pages rest on the assumption that the British Navy is adequate to its task. The writer believes it is, but these principles of defence would

be none the less true were it not. In that case the only thing to do would be to add to its strength, and avert the ruin of the Empire. No increase of military strength and defensive dispositions could remedy any weakness in the Navy.

The First Lord of the Admiralty, in October 1905, stated authoritatively that "the duty of the Admiralty is to safeguard the country and its dependencies from sea attack, and to protect its commerce. It is a responsibility it does not underrate. I am here, on behalf of the Board, to claim that we are ready to carry out our liability to the full." This assurance has been repeated by the present Government, and there is no ground whatever to believe that the Admiralty has failed to realise its duty, or that England will ever repudiate her responsibility for the defence of every portion of the Empire.

BIBLIOGRAPHY

Notes on the Chief Books bearing on Imperial Defence Consulted in this Work

SIR CHARLES DILKE, M.P., in his Problems of Greater Britain, was perhaps the first to allude to Imperial Defence, since the appearance in 1808 of a remarkable essay by General Pasley, R.E., on The Military Policy and Institutions of the British Empire, and of The Organisation of the Empire by the Canadian statesman Joseph Howe, in 1840. Time has made these works obsolete, but they foreshadow in a remarkable way the principles now established. Sir Charles Dilke wrote and spoke constantly on Imperial Defence, and published in 1892 Imperial Defence, in conjunction with Mr Spencer Wilkinson.

Colonel Sir John Colomb, Royal Marines, became the pioneer of Imperial Defence about 1867, and devoted his life to expounding the doctrines of sea supremacy and the true method of defending the Empire. He constantly insisted on this during his twenty years in Parliament, and wrote much on the subject. His chief work is The Defence of Great and Greater Britain, 1880. His life-work and its effect on national policy are described in detail in Imperial Defence and Closer Union, by Howard d'Egville, 1913, a book worth reading.

Admiral Philip Colomb, under his brother's influence, had a large share in promulgating the principles of

Imperial Defence, which he derived from naval history and formulated in his great work Naval Warfare, 1891. Much of his other work is collected in Essays on Naval

Defence, 1893.

Captain (now Admiral) A. T. Mahan, United States Navy, in his three classic volumes on The Influence of Sea Power in History, 1890, presented the subject as drawn from naval history, so that his work is virtually the Story of the British Navy. It has had great influence on the public, and perhaps on national policy, beyond his own country. A later volume, on Naval Strategy, summarises his views. His Life of Nelson, charmingly and enthusiastically written, is the standard life, and contains valuable strategical reflections. He has written many essays on naval subjects.

Admiral Sir Cyprian Bridge, R.N., may be regarded as one of the most competent authorities on Imperial Defence, having been Director of Intelligence at the Admiralty, and a member of the Colonial Defence Committee, responsible for the co-operation of the Army and Navy, and of England and the Colonies, in war. As Commander-in-Chief on the Australian, and later on the China, station, he had the opportunity of studying Colonial defence policy, and then of observing the latest naval war at close quarters. His views on Naval Warfare and Imperial Defence are thus based on long study and experience, and have great value. His little volume, Sea Power, 1910, should be read by all students of the subject.

Sir George Clarke, R.E. (now Lord Sydenham), a lifelong student of British war policy, has been Secretary of very important Committees—Lord Carnarvon's on "Trade Routes and their Defence," 1879 to 1882; Lord Hartington's better-known one on "The Organisation of the War Office and Admiralty for War";

and the permanent "Colonial Defence Committee." A member with Admiral Fisher of the Committee which reorganised the War Office and established the Committee of Imperial Defence, and then Secretary to the latter for some years, he has been in a position to influence statesmen of both parties, and may be looked on as largely responsible for the initiation of a scientific national war policy, and as the leading authority on Imperial Defence. He has written and spoken much to the point on that subject, notably in recommending national insurance for British shipping in war, and has published:—

The Navy and the Nation, 1887 (in conjunction with Mr Thursfield). Incisive essays dealing with current

fallacies of Empire Defence.

Imperial Defence, 1897. A popular presentation of the subject at that date, but still of value and interest.

Fortification. The leading British authority on the practical aspect of this subject. The chapter on coast defence bears directly on the subject of the limits of the attack British ports are exposed to.

But the bulk of Lord Sydenham's work has necessarily been official and unpublished, although of great effect on

the State.

Mr Julian S. Corbett has made an interesting study of naval history in five works which cover the time from Drake to Trafalgar. The latest, England and the Seven Years War, the Campaign of Trafalgar, and Some Principles of Maritime Strategy, should be read by all interested in naval warfare.

Mr J. R. Thursfield, M.A. Oxon., is best known as a writer in the *Times* on the naval subjects to which he has devoted his life. His chief books are *The Navy and the Nation*, in collaboration with Sir George Clarke; Nelson and other Naval Studies, 1909; and Naval Warfare,

in the "Home University Library," a shilling book written to enlighten the public, and as interesting as it is sound. Mr David Hannay also wrote in that series an excellent volume, The Navy and Sea Power. Another, The Modern

Warship, by Mr Attwood, is well worth reading.

Colonel Callwell, R.A., continued the subject of the influence of sea power from the point where Mahan stopped, in his Effect of Maritime Command on Land Campaigns since Waterloo, 1897. He also wrote an exhaustive book on the bearing of sea power on land war, Military Operations and Maritime Preponderance, 1905.

Colonel G. C. Aston, R.M.A., also treated on this

subject in Letters on Amphibious Wars, 1911.

For the operations of the Army the History of the British Army, by Fortescue, is the standard work, which all should read to form an idea of what the Army has donc. It is as delightfully written as it is full and accurate.

A similar standard work for the Navy is the History of the Royal Navy, by Sir W. Clowes. A Short History of the Royal Navy to 1688, by David Hannay, is worth reading. Naval Warfare, by Admiral Baron Maltzahn (translated 1908), is an interesting presentment of German views.

APPENDIX A

BRITISH CREDIT

LONDON is the centre of the international financial system, owing to world-wide credit. This is due primarily to the vast wealth of England, resting on the amount and wide ramification of her trade of 1400

millions, the large income produced by foreign investments (nearly 200 millions a year), the profits of the carrying trade (100 millions), and some 50 millions earned by banking and bill-discounting for floating foreign loans, and international trade.

The latter point may require some further elucidation. London is the great reservoir of capital for the world. The accumulated savings there awaiting investment now amount annually to over 200 millions. Not only do foreign Governments and municipalities come to London for loans, but also private companies requiring capital to develop works and resources in every part of the world.

In addition, London is the financial clearing-house of the world, and "a credit on London" is the universal currency. It is preferred to gold because transmissible with greater rapidity, greater ease, greater certainty, and infinitely less risk of loss. It is the only currency which the producers of all nations will accept as wholly satisfactory and sufficient. There is nothing like it elsewhere. No such function is performed by a bill on Paris, Berlin, or New York.

The stability of British credit is also due to the fact that England is a free market for gold, and really the only one in the world. But it mainly rests on the skill and experience of those who conduct business and finance, foreign loans, investments and bill-discounting, the soundness and economy of the banking methods, and the established reputation of British firms for prompt and fair dealing, and the unsullied integrity of British justice. But, above all, "our credit has been established and is dependent on the unchallenged supremacy of the British Navy, and upon confidence that our military strength can maintain order within the Empire and resist attacks from without" (Finance and War, by Mr Crammond, 1914).

APPENDIX B

THE WORLD'S STEAMSHIPS

THE total number of steamships owned by Great Britain gives by no means an adequate idea of her superiority over other nations, which lies in her greater number of the largest and fastest vessels.

This is brought out by the following figures, based on Lloyd's Register, and taken from Whitaker's Almanack

for 1914:-

	Size in	Size in Tons Gross.				Speed in Knots per Hour.				
	Over 5000	7000	10,000	Over 12	16	17	19			
All Nations . Britain	. 1775 . 843 . 284	614 354	206	1880	292	168	47 21			
Germany . United States France .	. 254	59 23	35 10 10	•••	52 30	9 25 18	6 6			
Japan	. 57	13	3	•••	9	7	5			

The numbers suitable for transporting troops are thus seen to be large for Great Britain, and small for her possible enemies. For this purpose the larger and faster ships are alone of importance. The use of small ships means having more of them, and thus increasing the mass of the convoy; the use of slow ships means that it will be longer at sea. Both results are detrimental to the success of an oversea expedition.

APPENDIX C

BRITISH TRADE AFLOAT

THE enormous amount of wealth afloat, which it is the function of the British Navy to protect during war, is difficult to realise.

The annual Board of Trade returns show the following to be the value of the oversea commerce of the United Kingdom (excluding specie, bullion, and diamonds) in 1912:—Imports, nearly 745 millions; exports, 599 millions; total trade, 1344 millions. The returns for 1913, not yet to hand, will show an increase.

But this forms only a portion of the wealth to be protected in war. The following must be added:—

					Million Pounds.
Movement of bullion					
(not included in tr	ade r	eturr	is above	:).	135
Transhipment trade					33
Coasting trade .				•	100
Fisheries	•				12
Value of the trading	ships	then	nselves		212
					492

These figures were calculated in 1909 on the Trade Returns of 1906 by the great statistician Sir Robert Giffen. They must have been far higher by 1912.

Nor is this all. British ships carry an immense trade for foreigners between foreign ports, and there is also the trade of India and the Colonies with each other, and with foreign countries, besides their own coasting trade. The total has been estimated at well over 600 millions. The total value affoat during 1912 can therefore not have been much less than 2500 million pounds. That for 1913 would undoubtedly be greater.

APPENDIX D

NAVAL STRENGTH OF ENGLAND COM-PARED TO THAT OF FOREIGN POWERS

Any statement on this subject is somewhat liable to criticism due to varying methods of estimating ships, but the following condensed table, taken from Brassey's Naval Annual, 1913, and from the Times of 11th April 1914, may be of interest to the general reader who desires to have a rough idea of the strength of England's Navy as compared to those of other Powers. This is the more necessary, as misleading statements have been made, sometimes possibly to serve political and other interests.

	Strength, April 1914.				Strength in	
Nation.	Pre-Dreadnoughts.		Modern Vessels (Times).		Modern Ships, July 1916 (Times).	
	Battle- ships.	Armoured Cruisers.	Battle- ships.	Cruisers.	Battle- ships.	Cruisers.
England	40 15 16 17 9 14 6	42 9 15 15 6 4 7	28 17 2 0 5	57 36 10 9 H	42 26 12 12 7 7 6 4	73 42 ? 9 16 ? 9

APPENDIX E

MILITARY STRENGTH OF ENGLAND

THE BRITISH EXPEDITIONARY FORCE

A short statement of the strength and organisation of the Army for action oversea may be of interest.

The British Expeditionary Force consists of:

Six Divisions of all Arms, each comprising 12 Battalions Infantry and 76 guns, 5000 horses.

One Cavalry Division and two Mounted Brigades, with 18 Regiments and 36 guns, 10,000 horses.

Administrative Services working on the Lines of Communication, two Battalions Infantry to guard the latter.

First Reinforcements (13,000 men) at the Base. Headquarters with Infantry and Cavalry Escort. Engineer Units for Signal and Bridging Service,

and Air Services.

In all: 75 Battalions Infantry; 21 Regiments of Mounted Troops; 486 guns; 186 machine guns.

Total, 160,000 officers and men.

A Seventh Division is to be formed from the troops in

the Mediterranean and South African stations.

It may be noted that this force is practically the equivalent of 3 German Army Corps and 3 Cavalry Divisions, which comprise 75 Battalions, 24 Cavalry Regiments, 450 guns.

The total strength of the British Army in 1913 was:

Regular Army, at home and abroad 234,426 Special Reserve (the old Militia) 64,555 140,000 Reserves, about . . .

Of the Army some 75,000 are serving in India, and

40,000 in the Colonies and Egypt.

The Territorial Force comprises 249,185 men, and is organised in 14 Divisions and 14 Mounted Brigades. Of the Regular Army there will be left also in England after the despatch of the Expeditionary Force abroad a number of Battalions and Batteries.

APPENDIX F

SHIPPING REQUIRED FOR TRANS-PORTING TROOPS

THE shipping required for military purposes is a matter of interest, whether in considering the difficulties of an enemy invading the Empire or the requirements of a British expedition.

The size of a ship is indicated by her tonnage. In a warship this means her displacement, or her actual weight in tons. In all other ships the tonnage is a conventional measurement representing not her weight, but her capacity (or the number of cubic feet in all closed spaces in her), expressed in "tons" arbitrarily taken as meaning too cubic feet.

Gross tonnage must be distinguished from net tonnage. Gross tonnage is the whole capacity of the ship; net, the cubic space available for cargo and passengers—that is, the whole capacity less the space required for navigating the ship, i.e. the room taken up by the engines, boilers, coal, ballast, and water, accommodation for officers, crew, and stores. Net must not be confused with freight tonnage,

a purely mercantile term used for the cargo space only in tons of 40 cubic feet.

The net tonnage of vessels is by no means the same proportion of the gross in each case, but may be anything between 60 and 40 per cent. of it. Its amount depends on the plan and construction of the ship, the power of her engines, the number of her crew, and the amount

of coal, water, and stores needed for the voyage.

Of the net tonnage only part is available for carrying troops, as it is obvious that men and horses cannot be carried in all parts of the ship allotted to cargo. The number of men that a ship can carry depends on whether they can be more or less crowded up, according as the voyage is a short one of a few days or an ocean voyage of a week or more.

British experience has been so vastly greater than that of any other nation that the following figures may be considered the best guide in transport calculations. The requirements laid down officially in England are for an ocean voyage:—2.5 tons per man and 7 per horse, net, or 4 tons per man and 12 per horse, gross. For a short voyage, 2 tons per man and 8 per horse. The vehicles, harness, etc., accompanying troops can be carried in the holds not available for men and horses, so that the space required for a complete unit can be reckoned on the above rule.

The tonnage for each unit is given in Field Service Pocket-Book, 1911, p. 170:—A battalion, 5000 tons; a battery, 3000; a squadron, rather less; an infantry brigade, 20,000; a division, 166,000.

The Japanese reckon 1½ tons per man and 2 per horse gross for a short voyage; 3 tons per man and 4 per horse gross for a voyage of one week. But in the Russian War they used 68,760 tons gross to transport

the 8th Division, of 16,000 men and 3000 horses, for a few days' voyage. This gives 3 tons per man, 7 per horse.

The United States when invading Cuba used 32 transports of 53,000 tons to transport an army of 16,375 men, 2295 horses, 26 guns, 202 wagons, which gives 2½ tons per man and 6 per horse for a four days' voyage.

The view of the Quartermaster's department of the United States Army, which is charged with sea-transport, is that 9 to 10 tons gross per man will give sufficient transport for a force duly provided with cavalry, artillery, stores, and transport. The whole national shipping of the Atlantic coast, it is stated, could only transport a force of 60,000, and that of the Pacific coast one of

40,000 men, completely organised.

This bears out the view that British possessions are not in danger of invasion. It is probable that no foreign Power has transport enough to send more than 40,000 in one trip over the ocean. On the other hand, England, according to an Admiralty estimate of 1900, could, without affecting British trade and food supply, send abroad at one time 53,000 men, 20,000 horses, 2600 vehicles, in 134 ships of 457,112 tons gross. The 35,000 men sent to Egypt in 1882 took 125 ships, 350,000 tons. Far the greatest movement over the ocean ever undertaken was that to the South African War. In 181 days from 1st November 1899 to 30th April 1900, 169,152 men were carried to South Africa from home and 11,300 from the Colonies, a total of 180,452, or an average of 1000 per day—an output not equalled by the Siberian railway in the Japanese War.

APPENDIX G

COST OF WAR

It may be of interest to form an idea of the cost of war. The expenditure which would have to be met by England during hostilities has been dealt with in a lecture on Finance and War, by Mr Crammond, January 1914. He estimates that 250,000 men would be mobilised for the Navy, and 550,000 for the Army (Expeditionary Force 160,000, besides its reserves and recruits and Territorial Force 300,000). It is reckoned that £1 per man per day will defray all expenses of utilising these forces. Total, £800,000 a day.

In addition, there would be great naval expenditure on fuel and stores and on repairs of ships and new building. He believes that 100 millions would be spent in the first six weeks of the war, and that the daily expenditure would not fall below £500,000 for the Army and £300,000 for the Navy per day during the war.

Appalling as these figures are, they do not equal those confronting the great Continental Nations if they go to war with each other, while the power of England to bear long-continued expenditure is far greater than theirs. France and Russia, with their large reserves of gold, and France in particular, owing to her national wealth, are better prepared than the other Powers of Europe to face six months of war.

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